

Class 040

Book

829

Bryn Mawr College Library

Beside the main topic, this book also treats of

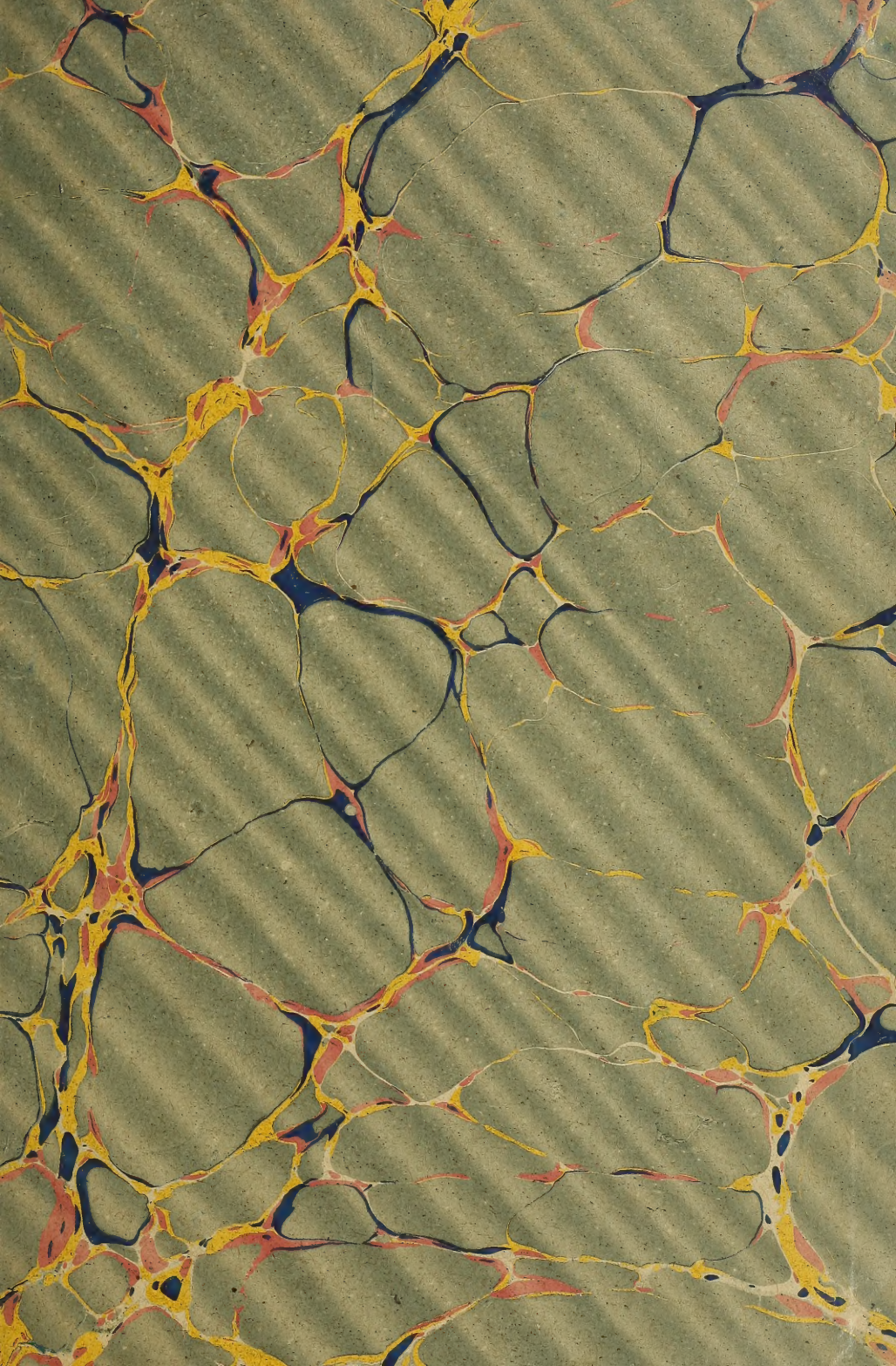
v. 1-5

Subject No.

On page

Subject No.

On page



Aug. 5. 50

Contents.

No. 1.

The Library at the convent of the Holy Sepulchre at Jerusalem. J. Rendel Harris. -----	1
Work of Haverford college Observatory. Francis B. Seavernorth. -----	19
On the Geometry of a Nodal circular cubic. J. Morley. -----	88
On the Period of Rotation of the Sun. H. Brew. -----	100
On the Symbolic Use of the Colors Black & White. J. B. Hummure -----	112

No. 3.

The passion of Perpetua. J. R. Harris & S. K. Gifford. -----	1
On some properties of the triangle. J. Morley. -----	74
No. 4. On the numerical characteristic of a Cubic Curve. Charlotte Angus Scott. -----	1
On the caustic of the Epicycloid. J. Morley. -----	9
Sun-spot observations. H. V. Hummure & F. P. Seavernorth. -----	17

No. 5.

The Diatexaron of Tatian, A Preliminary Study. J. Rendel Harris. -----	1
--	---

HAVERFORD COLLEGE STUDIES

Published by the Faculty of
HAVERFORD COLLEGE.

COMMITTEE ON PUBLICATION:

ISAAC SHARPLESS

FRANCIS B. GUMMERE

HENRY CREW



No. 1

\$1.00

10814

AS
36
H25
v. 1-5

CONTENTS.

	PAGE.
The Library of the Convent of the Holy Sepulchre at Jerusalem. J. Rendel Harris	1
Work of Haverford College Observatory. Francis P. Leavenworth	19
On the Geometry of a Nodal Circular Cubic. Frank Morley	88
On the Period of Rotation of the Sun. Henry Crew	100
On the Symbolic Use of the Colors Black and White in Germanic Tradition. Francis B. Gummere	112

To obtain copies of this publication address the Secretary of Haverford College, Haverford College P. O., Pa.

THE LIBRARY OF THE CONVENT OF THE HOLY SEPULCHRE AT JERUSALEM.

TO write the history of the formation of this famous Library would be a task of almost as great difficulty as the history of the Sepulchre itself; its development and growth would present as many problems as the walls of the city do to the archæologist; there is much here which will not answer an inquiry as to its origin, and doubtless much is now wanting which once was here. No doubt that, as in the great collection on Mount Sinai, much has been gathered by the pious deposit of successive generations of pilgrims as well as by the patient industry of convent scribes, and with equal certainty much has been withdrawn by the impious abstraction of successive generations of travellers; but the convent keeps no book of benefactions, and the book-thief has in the majority of cases successfully covered his tracks. We can, therefore, only say that the Library has reached to-day a point where it has little to hope in the way of increase, and little to fear in the direction of being minished and brought low. The carelessness of early days has given way to a scholarly interest, which augurs well for the influence of the Greek Church on the theology of the future; and the kindly welcome given to the literary traveller is one of the most graceful tokens of the genuine catholicity of the East. We need not, therefore, doubt that the fixity of the collection is an established fact, and that the publicity which its treasures have attained will be one of its greatest safeguards in days to come. A catalogue, especially a detailed printed catalogue, is almost as good a protection as a fire-proof building or an iron door. Such a catalogue is already prepared and will soon be printed. The scribe's anathema upon the alienator of books will give way to the more effectual operation of common law, and instead of in-

voking the malediction of the 318 Holy Nicene Fathers, we shall rely upon the protection of the civil authority who has charge of the charitable and ecclesiastical possessions.

Whether, then, we can write the history of the Library of the Sepulchre or not, we can at least be sure that we occupy a good standpoint from which to commence our investigations. The notes that we may make will be supplemented by those visitors who may follow us; they will hardly be contradicted. For this reason, and in the hope that our experience may be of value to others (for the future of the Library is the record of the scholars that work there) we have gathered together some notes of our first six weeks of privilege amongst its venerable folios.

1. COMPOSITION OF THE LIBRARY.

The Library of the Holy Sepulchre to-day consists of three great collections, which have recently been brought together by command of the Patriarch Nicodemus. The names of these collections will be familiar to most of those who are interested in Greek and Oriental literature. A reference may, however, be made to those travellers who have done most to throw light upon the state of the Eastern libraries, the principal names among them being Scholz, Tischendorf, and Coxe. Of these, the first two were occupied more immediately with the investigation of the texts of the Old and New Testament, either to record the existence of valuable copies, or to transfer them to what they considered more desirable situations; while the third was engaged in the investigation, on behalf of the British government, of the state of the Eastern libraries, and of the quantity and quality of the books yet remaining in them. From these writers we obtain our chief information as to the three great Greek libraries in or about Jerusalem; viz.: the Library of the Sepulchre, the Library of the Convent of Mar Saba, and the Library of the Convent of the Holy Cross. These three collections have now been brought together under the shelter of a common roof, and the ægis of a common catalogue, in the buildings of the Library of the Convent of the Holy Sepulchre.

With great advantage to the student, the three collections have been kept carefully distinct, and the catalogue also distinguishes them by separate numbers in successive series, so that any manuscript which is quoted from the united collection will be known by its number with the suffix of S. Sepulch., S. Sab., or S. Cruc., as the case may be. It will not, of course, be assumed that these names imply anything as to the remoter origin of the separate MSS.; the various collections have each its own history to tell of the changes and chances, disease and mortality of book life. Many of the MSS. have known a change of domicile; all the S. Saba books, for instance, were not written on the borders of the Dead Sea; the notes which we find in them show that some of them came from the Convent of St. John Baptist, the Prodomos or forerunner, near the banks of the Jordan. The books at the Holy Cross Library, which lies a short walk westward from Jerusalem, show tokens that some of them were brought thither from Jerusalem itself. While as to the larger collection, which forms the nucleus of the modern Library, this is probably the most diversified of all in its origins. A single instance shall be given of its centripetal tendency. Upon one of its shelves there now lies a little book which has made more stir the last ten years than any other MS. of the same or any other size. It was brought here from Constantinople by order of the Patriarch, and contains, *inter alia*, the unique MS., as far as we know, of the Teaching of the Twelve Apostles.

Of these three precious collections, then, with the flanking of a good company of printed books of all periods, the present Library consists. Of their arrangement on the shelves and in the cases we will speak presently. A few more words are necessary, however, with regard to the component collections. It will be noticed that I have already drawn attention to the report of Mr. Coxe, the sub-librarian of the Bodleian, on the Greek MSS. yet remaining in the libraries of the Levant. Of all reports which have reached the West this is the most important, and that for various reasons. First of all, it was catholic in its method. Mr. Coxe was hampered by no special prejudice in favor of particular authors or isolated

branches of study; he was not making a *Biblisch-Kritische Reise*, like Scholz or Tischendorf; he did not come to read or to collate, but to survey; and if he had been able to spend more time and been favored with better health, he might have made a veritable ordnance map for scholars of the region over which he travelled. In the next place, he did not hesitate to treat the popular English prejudice of his day in favor of so-called classical authors in the way that the fetish deserved. His remarks on this point are worthy of quoting:

“If by nothing of interest they mean that they find there no new thing or no old thing of which we have only heard by report; that there is no new philosopher, no new orator, or historian or dramatist, no rival of Plato or Demosthenes, or Thucydides or Æschylus, or that they cannot find in such localities the lost books of Tacitus or Livy—then I must agree with them; but, surely, if we search these repositories for the gratification or instruction of the classical scholar only, we leave out of sight a large proportion of the literary world, who have an equal right to have their own peculiar interests in the field of literature represented.” (*Report*, p. 3.)

In the third place, Coxe was sent out with the very purpose of making known what he found—publicity was an essential of his scheme—nor is there the slightest reason to suppose that he reserved for himself or his friends any portion of the information which he obtained. With Tischendorf it is altogether different. A studied obscurity is frequently found in his reference to MSS. which he has seen or which he quotes; the words “in the East,” or “in the dust of an Eastern library,” are regarded as sufficient enlightenment for his readers; and it is often only those who have been initiated by much actual study of his movements, or who have something of the detective in their composition, who are able to tell that he is quoting a MS. at Mar Saba or some other of the many convents which he visited.

The further advantage of Coxe’s notes is this: that he furnishes us a check by which to compare the collections as they at present stand in the Library, with their condition at the time when he made his inquiry; a matter of the highest im-

portance, especially in the case of certain notable books to which we may refer.

Now this is a point upon which I have not yet been able to form a complete judgment. One must first ask whether the books have all been brought to Jerusalem from the two libraries of Mar Saba and the Holy Cross. With respect to the latter, as far as my present information goes, there has been a transfer made of all the leading MSS. When Coxe made his Report in 1858, the case stood as follows:

“In the new college, situated on the site of and succeeding to the old monastery of St. Cross, about two miles or less from the Jaffa gate of Jerusalem, there is a list of the MSS. formerly in their possession. These have now, with scarcely an exception, been removed into the Library [of the Holy Sepulchre]. They were 180 in number, of which I should say that all nearly remain to this day. A very few still continue with their former proprietors; indeed there are only eight, but all of their class very fine MSS.” (*Report*, p. 10.)

He then goes on to describe these MSS. in detail, from which it is easy to infer that these eight MSS., all or nearly all of them, have since been transferred. One of them I took especial notice of, as Coxe had said that the Catena on the Acts which it contained was made up of extracts from Chrysostom, Cyril, etc., and *Irenæus of Lyons*. It may be imagined with what zeal I attacked a book which was likely to contain any fragment of the last Greek text of Irenæus. But the end sits in judgment on the beginning, and I found that it was only a very early copy of the Catena on the Acts, which Cramer had published from a MS. in New College, Oxford, and that all the precious extracts were already in print!

I think all the S. Cross MSS. are now at Jerusalem, the printed books remaining in the College. It is true Coxe mentions 180 MSS., and the present collection only shows 109. The deficit is, however, to be found amongst the Oriental MSS., which have been detached from the primitive collections, and notably amongst the Iberian MSS., of which the Convent must have had a very fine collection, as there are now 143 MSS. of this language in the Sepulchre Library.

Tischendorf, on the other hand, seems to imply that Coxe did not see all the books in the Library. His language is as follows: "*Huius collegii novem (l. octo?) tantum codices indicavit clar. Coxe in eo quem modo vidimus libro p. 53, sqq. Multo plures nobis examinare contigit. In iis quos Coxius praeteriit etiam est codex memb. form. quat. omnium Novi Testamenti librorum, item, de quo jam dixi in nuperrima editione V. T. juxta LXX p. lviii psalterium uncialibus litteris sæculi IX scriptum.*" The Psalter to which I shall allude presently is in the Library (Cod. 96, S. Cruc.), and the New Testament will also, I think, be found on the shelves.

So much for the Holy Cross books; now for Mar Saba. The Library at S. Saba was formerly divided into two collections in separate buildings—one the so-called Chapel Library, the other the Tower Library. The latter was not generally shown to visitors, and the books kept there exhibited a state of decay which was melancholy to the last degree. Between three and four hundred books used to be kept in this tower, in a room with a boarded floor whose rottenness and interstices were a trap to the unwary investigator. Many of them were imperfect, broken-backed, worm-eaten; in fact, subject to all the ills that books are heir to. One of our first questions, then, will be whether the books in the Tower Library have also been transferred, for they seem to be the ones that most needed a change of air. As far as I can judge from a comparison of the Sepulchre books with Coxe's notes, this seems to have been the case. I have not yet visited Mar Saba, and it is, of course, uncertain whether this might result in further enlightenment; but, as far as I can judge, the transfer seems to have been complete.

When, however, we come to the case of rare and important books, known to have existed in the Library in Coxe's time or before, the case is a little more difficult. For example, one of the attractions which I had in mind in coming here was a palimpsest uncial copy of the *Orestes* and *Phœnissæ* of Euripides. Coxe described it as follows:

"One of the most interesting volumes of this Library, however, is the palimpsest above alluded to, and which, I regret

much, I was unable to secure for our own national collection. The later writing, indeed the book of the present day, exhibits a commentary by an anonymous writer on the Greater Prophets, written toward the close of the eleventh century; but beneath this, the work of an earlier scribe by at least two hundred years, now rubbed or scraped out, can be traced the greater part of two of the plays of Euripides, the *Orestes*, namely, and the *Phœnissæ*, with scholia throughout; besides some of the poems of a Christian writer, which I think I have since made out with sufficient certainty to be those of Gregory of Nazianzum. But even below all this occurs again the writing of a still earlier penman, and in uncial character, of which a word here or there is all that can now be deciphered." (*Report*, p. 13.)

According to Coxe, then, this book should be found amongst the Mar Saba codices, and I was naturally eager to see a MS. about which Coxe (to say nothing of Tischendorf) had spoken so glowingly. But there was no such book amongst the S. Saba collection. From Coxe's words it was natural to infer that the text of Euripides was written in uncials, for he describes it as *at least* two centuries earlier than the eleventh century, and it would be very rare indeed to find a Greek cursive MS. written *as early* as the ninth century; and further, the subject of the upper script, for which one would look among the catalogued titles, was a Commentary on the Twelve Prophets. But no such book and no such palimpsest existed among the Saba MSS.

After long searching I found it amongst the books of the Sepulchre collection proper; and a reference to Tischendorf's *Anecdota Sacra et Profana*, ed. ii, p. 222, will show that he brought it from S. Saba to the city. But it is not as both Coxe and Tischendorf describe it—a Commentary on the Twelve Prophets—but a text of that portion of the Scriptures; and further, the underwriting in question (the Euripides text) is not an uncial, as indeed a careful study of Tischendorf's language would have shown, but a cursive hand, which, I feel sure, is not as old as the ninth century, nor is the upper text as early as the eleventh century.

However, apart from the question of its correct description, the book is there, and I am inclined to believe that there has not been much taken from the Mar Saba books in late years, and that we cannot be far wrong in saying that the *whole* of this collection is now in the Sepulchre Library. This particular volume was specially protected by being transferred to Jerusalem; but we may remark that in a short period of time previous to this, three very covetous people at least handled it. Coxe naively confesses his efforts to have been much quickened to acquire this MS. for the British Museum; Bishop Porphyry, who certainly carried off treasure from S. Saba, has left pencil notes in the book indicative of its importance; while Tischendorf, who carried so many palimpsests to St. Petersburg, has shown his affection for this volume not only by giving a well-detailed description of the six MSS. that were used up to make the modern one, but by the traces of his chemicals on the faded writing in sundry places. As far then as we have been able to test the matter, the transfer of the MSS. seems to have been complete.

It will be observed that in examining these points we have given especial attention to Coxe's memoranda; it is somewhat melancholy that this Report has been so little known and still less acted upon. It is now thirty years since the British Government issued the Report for the modest sum of one shilling, for which it can still be obtained of Messrs. Eyre & Spottiswoode; but I find few libraries contain it. Indeed, if I remember rightly, my own attention was first drawn to it by Dr. C. R. Gregory. Yet this Report was, as I have said, published more than thirty years ago.

The S. Saba books, although removed *en bloc*, are at present the least interesting part of the collection; indeed, they are almost disappointing. One has, however, always to remember in an Eastern library that it differs from the Western libraries in being the library of a living language; so that while in a Western library there are not many Greek MSS. later than the invention of printing, in the East the case is quite different. Printing has had little effect here until late years, and, in consequence, there is much late and worthless matter mixed with the valu-

able and the venerable. This is especially the case with the books from Mar Saba, as Coxe long ago pointed out.

We have now described the three principal collections which make up the present Sepulchre Library. From these have been detached the Oriental collections which stand in separate compartments; viz.: the Arabic, Ethiopic, Syriac, Slavonic and Georgian MSS. There are some Turkish MSS. also which have not all been separated, a few of them yet remaining with the Greek MSS., especially in the S. Saba collection; and, to the amusement of those who do not realize the truly Eastern character of the books, there is one Latin MS. (a copy of Eutropius) which stands in the midst of the Greek MSS. of the Sepulchre like a crow in a company of nightingales. Of Coptic and Armenian MSS. I have not found a trace, nor have I found as yet a shred of Hebrew. The total of the MSS., as estimated in the new catalogue, is as follows:

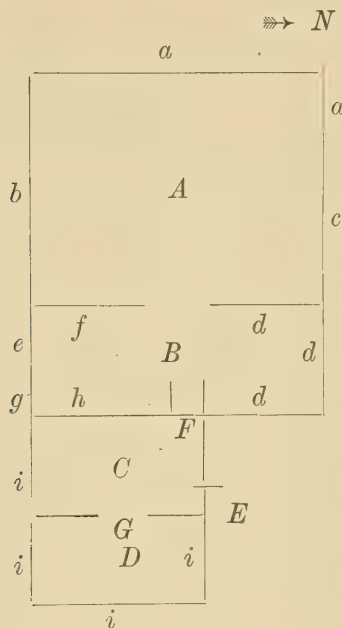
Greek:	{ Holy Sepulchre	644	
	{ S. Saba	706	
	{ S. Cross	109	
		—	1459
	Turkish and Arabic	167	
	Georgian	143	
	Syriac	50	
	Ethiopic	19	
	Slavonic and Wallachian	22	
		—	401
			—
			1860

We will now show how these are arranged in the library.

2. ARRANGEMENT OF THE LIBRARY.

The Library of the Holy Sepulchre is, from an architectural point of view, sufficiently humble; Coxe describes it, however, as “a good room, secured by iron doors.” As at present arranged it would be better described as four rooms thrown into one, but perhaps it has been enlarged since Coxe’s time

and since the arrival of the Saba MSS. A rough plan will give the best idea of the building and arrangement.



The four rooms are *A*, *B*, *C* and *D*, of which *A* and *B* are occupied by the MSS. and choice printed books, and separated from the other two rooms by a heavy iron door (*F*), with double lock. The entrance to the library from without is *E*, on the north side. *A* is lighted from the roof, and the other rooms are scantily lighted chiefly from barred windows, no light at all being admitted from the south, so that the rooms are peculiarly chilly and unpleasant to work in. The appearance of the two projecting rooms, *C* and *D*, is something like a well-ordered woodshed. *C* is the reading room, and it is lighted on the north side. The books are arranged as follows: In the inner room (old library) *a*, *a* represents the MS. books of the Holy Sepulchre, and the rest of the room is occupied by the Patristic and Theological books (*b*) on one side, and on the opposite the Classical and Historical works (*c*).

Altogether this is a very good reference library of Greek literature. All the leading fathers and authors will be found here. In the adjacent room the Mar Saba MSS. occupy all of one side (*d, d*), while on the other side, *e* stands for the Holy Cross MSS.; *f* the Syriac, Ethiopic and Slavonic MSS., ranged one above the other; *g* the Georgian MSS., and *h* the Arabic and Turkish MSS. In the outer rooms, *i* stands for a miscellaneous collection of printed books and pamphlets.

All the books, except those in room *D*, where the cataloguer's work is not ended, are neatly arranged in cases with glazed doors, and to every MS. is affixed its number and a note of the collection to which it belongs. The credit of this work is due to the learned Greek paleographer, Papadopoulos Kerameus, who has been occupied for more than a year, I believe, in the arrangement and cataloguing of the books. A summary catalogue lies in the reading room for the use of students, and a detailed catalogue is said to be nearly ready for the press. When this work is finished there will not be many English colleges that can show such good equipment for study.

3. CHARACTER OF THE LIBRARY.

And now we come to the question of the books themselves. What is the especial character of the collections and to what branches of study are they most likely to minister? Upon this point we have already intimated that the Library is not what would be described as a classical library; the poets and philosophers are conspicuous by their absence, so are the historians. Those authors who appear, come in as very late productions, which look rather like school-books than valued authors. I infer this also from the fact that the same tragedies of Euripides, for instance, turn up here and at Alexandria and on Sinai; the Hecuba of Euripides seems to have been a great favorite, yet I do not think an early copy can be found. A few favorite tracts on Aristotle may also be found, one late play of Aristophanes, and a few other pieces to which Coxe has given sufficient reference. The Library must certainly be described as non-classical. Perhaps that is in

the nature of things. Possibly the classics may have been removed ages since, for the process of removal in some libraries has been continuous and goes back to early times—the case of the Patmos Library, with their great Plato, it comes down almost to our own day.

If the Library is non-classical, it is also non-unorthodox. I use this word by preference to the word orthodox, to which it is logically equivalent, because there is little doubt that writers who have fallen under ecclesiastical censure have perished by deliberate neglect. The unorthodox books have been weeded out. How else could it be that no work of Origen, except such fragments of his as lie hid in catenas, should be found in this great and important collection. The same thing is true of lesser writers who may have savored more or less unpleasantly of heresy. It is a disappointing feature to the student of the history of doctrine or discipline in the early Church.

But if in these directions the Library has to be described negatively, there is one direction in which it is emphatically rich; viz., in works bearing on the ascetic life. The monastic writers are there: John Climacus (or of the Ladder), surnamed so from his *ladder* of spiritual progress, is everywhere; Maximus and Nilus, and Dorotheus and the abbot Isaiah, and the holy old men of the desert are well represented; and even the greater fathers, such as Basil and Ephrem, will be best known in this Library by their ascetic works, and the Lives of the Saints are a glorious collection. It is quite natural that this should be the distinctive feature of the collection. We describe the Library therefore, as non-classical, orthodox and monastic. Of uncial MSS. there are very few. Amongst the S. Cruc. MSS., however, there is one fine uncial Psalter of the ninth century (to which Tischendorf drew attention in his latest edition of the Septuagint), with very brief marginal glosses, also in uncials, and a number of Hexaphla readings, chiefly from Symmachus' translation. There are also one or two very fine uncial palimpsests to which we shall allude presently, and amongst the fragments which the cataloguer has carefully detached from the covers and bindings of the MSS. there are some leaves from a lec-

tionary of the Old Testament, which go back perhaps as far as the eighth century. There are also some fragments of uncial writing which have been used in the binding or covering of other books; for example, in the case numbered 704, S. Sab., will be found an uncial leaf containing the following in a rather coarse hand (? ninth century). I transcribe a few lines only:

ΠΩΝ. ΚΑΙ ἦλθον ἐν πολει ΔΥ
ΡΑΧΙΩ· ΚΑὶ ΕΙΣΕΛΘΟΝΤΕΣ ΤΗΝ
ΠΥΛΗΝ ΤΗΣ ΠΟΛΕΩΣ· ΕἶΔΟΝΤΟΝ
ΑΓΙΟΝ ἈΣΤΕΙΟΝ ΤΟΝ ΕΠΙΣΚΟΠΟΝ
Τῆς ΑΥΤΗΣ ΠΟΛΕΩΣ ΚΡΕΜΑΜΕ
ΝΟΝ ἘΠΙ ᾠΤΡΟΥ ΜΕΛΙΤΙ ΧΡΙΣΜΕ
ΝΟΝ ΚΑΙ ΤΙΤΡΩΣΚΟΜΕΝΟΝ Ὡ
Πὸ σΦΙΚΩΝ ΚΑΙ ΜΥΪΩΝ ΔΙΑ Τῇ
ΠΙCΤΗΝ ΤΟΥ ΧΥ ΚΑΙ

from which it appears to be a portion of a Martyrology, and in particular of the Crucifixion of Asteius, the bishop of Dyrrachium.

In the MS. marked Cod. 23, S. Cruc. (a splendid copy of Dionysius Areopagite with marginal scholia in uncials), there stands at the end an uncial leaf written in two columns, of which I transcribe part of the left-hand column, the hand being not very different to what we are accustomed to regard as ninth century, which is evidently an extract from some commentary on the First Epistle to the Corinthians; the exegesis of the commentator on the words "and I am of Christ" (1 Cor. i, 12) being of a rather artificial character.

ΑΛΛ' ΕΝ ΟΙΣ ΟΥΚ ΕΧΡΗ ΓΙΝΕΣ
 ΘΑΙ· ΔΙΑ ΤΟΥ ΟΙΚΕΙΟΥ ΠΡΟ
 ΣΩΠΟΥ ΠΡΩΤΟΝ ΠΟΙΕΙ
 ΤΑΙ ΤΗΝ ΔΙΟΡΘΩΣΙΝ
 ΑΛΛΟΤΙ ΜΕΝ ΟΙ ΤΩ ΔΙΝΙ
 ΚΑΙ ΤΩ ΔΙΝΙ ΠΡΟΣΚΝΕΜΟΝ
 ΤΕΣ ΕΛΥΤΟΥΣ ΗΜΑΡΤΑ
 ΝΟΝ. ΔΗΛΟΝ.

ΚΑΙ ΚΑΛΩΣ ΕΝΕΚΑΛΕΣΕΝ
 ΕΙΠΩΝ ΟΤΙ ΟΥ ΚΑΛΩΣ
 ΠΟΙΕΙΤΕ ΛΕΓΟΝΤΕΣ· ΕΓΩ
 ΜΕΝ ΕΙΜΙ ΠΑΥΛΟΥ· ΕΓΩ
 ΔΕ ΑΠΟΛΛΩ· ΕΓΩ ΔΕ ΚΗ
 ΦΑ. ΤΙΝΟΣ ΔΕ ΕΝΕΚΕΝ
 ΠΡΟΣΕΘΗΚΕΝ· ΕΓΩ ΛΕ
 ΧΥ· ΕΙΓΑΡΟΙ ΑΝΟΙΣ ΠΡΟΣ
 ΝΕΜΟΝΤΕΣ ΕΛΥΤΟΥΣ
 ΗΜΑΡΤΑΝΟΝ· ΟΥΔΗΠΟΥ
 ΚΑΙ ΟΙ ΤΩ ΧΩ ΕΛΥΤΟΥΣ
 ΑΝΑΤΙΘΕΝΤΕΣ· ΑΛΛΟΥ
 ΤΟΥΤΟ ΕΝΕΚΑΛΕΙ ΟΤΙ ΤΟΝ
 ΧΝ ΕΛΥΤΟΙΣ ΕΝΕΦΗΜΙ
 ΖΟΝ· ΑΛΛΟΤΙ ΤΙΜΗCΑΝΤΕC
 ΜΟΝΟΝ . . — —

Of palimpsest MSS. also there are only two or three; first and foremost is the palimpsest, for example, which contains Euripides, Gregory of Nazianzum, etc. The most striking palimpsest is Cod. 36, S. Cruc., of which I will give a specimen. The MS. is described in the catalogue as follows:

Τεῦχος μεμβράνικον ἐς 40 IB'—IG' αἰῶνος. 215 φύλλα παλίμψηστα. ἀνέφαλον. Βασιλείου Καισαρείας ὁμιλίας καὶ ἐπιστολαί.

The following specimen taken from *f* 198, *b*, will show the nature of the underlying text:

ὥς οὐχὶ καὶ ἔτασις αὐ
 τῶν ἔσται
 ἀλλὰ δὴ ἐπερώτησον τε
 τραπεζὰ ἐαν σοί
 εἴπῃ
 πτεῖν αὐτοῦ νοῦσαν σοί
 ἀναγγεῖλῃ
 ἐκδιηγῆσαι δὲ γῆσαν
 σοὶ φράσῃ
 καὶ ἐξηγήσονται σοί
 ἰσχυροὶ θά
 λασσῃ
 τίς οὐκ ἐγνώσεν τῶν
 τοῦτοισιν
 ὅτι χεὶρ ὄν ἐποίησεν

This is evidently a portion of the Book of Job, and it is accompanied by a marginal commentary in fine vertical uncials, with occasional readings from the Hexapla. We may, therefore, be sure that we have here a copy of the Book of Job with accompanying scholia (so-called Scholia of Olympiodorus); the same as is found in the great Patmos Job (uncial text and commentary with illuminations of the eighth century) and in several other early MSS., especially one to which we will allude presently. I think this must be the palimpsest of which Tischendorf speaks in his *Anecdota Sacra et Profana*, ed. ii, p. 225. He is referring to a MS. in the Holy Cross Library and speaks as follows:

"In alio codice sub recentiore scriptura Græcæ litteræ unciales sæculi VIII apparent. Cuius scripturæ antiquioris exempla duo hæc sunt: Πολλὰ τις ἵνα μὴ εἰς οφθαλμὸν λαβῇ τὴν πληγὴν τιμὸν μέλος δεχεται δερμα ὑπερ—ἡ κοπρία τῆς παντὸς θρόνου βασιλείου σεμνότερα· ἀπο μὲν γὰρ τοῦ θρόνου βασιλείου οὐδὲν—κερδὸς ἀλλὰ προσκαιρὸς τερψίς·"

Thus Tischendorf, who might have guessed from the allusion to the dung-hill and its superiority to a king's throne,

may have imagined that he was reading a marginal comment on the Book of Job (the comment in this case, as a matter of fact, being taken from Chrysostom).

We may pass from palimpsests to illuminated codices without changing the subject, for it happens that the Sepulchre Library contains this very same Book of Job in a cursive hand with illuminations. The Book of Job is a favorite subject with the Byzantine calligraphers and artists. It is found not only in the two Sepulchre codices and the Patmos MSS., but in a very fine cursive MS. at Copenhagen (the same which contains the Psalter of Solomon). But the S. Sepulchre copy (Cod. 5, S. Sep.), is in some ways the most splendid of all, and contains a finer series of Byzantine illuminations than I remember to have seen in any other early Greek MSS.; in fact, it contains no less than 117 illustrations of the text. One can only wish the codex could be fac-similed from end to end. There is another very fine illuminated MS. amongst the Sepulchre books: a copy of the orations of Gregory of Nazianzum, which is not very inferior to the Job.

The library also contains some very fine rolls of the early liturgies (Chrysostom's, Basil's, and others); one of these rolls is adorned on its margin with delicate little pieces of illumination. They are written, as I believe is the custom with all Greek rolls, on both sides and transverse to the length of the roll. They deserve to be carefully studied. I remember the regret which the late Dr. Swainson expressed (when I drew his attention to the rolls in Coxe's catalogue) that he had not been able to avail himself of such treasures in his great work on the Greek Liturgies. A scholarly examination of such documents is much to be desired.

We come now to the question of Biblical and Patristic texts, and here we must be brief; a printed catalogue will, I hope, tell all these things in detail before long. The library is rich in New Testaments, many of them being of the eleventh century; and there are several copies of the Apocalypse, which is always somewhat of a rarity. But in texts of the LXX there is very little. One very fine copy must, however, be mentioned (Cod. 2, S. Sep.); it ranks amongst the earliest cursive MSS.

known, and contains a pencil note by Coxe, ascribing it to an age as high, perhaps, as the eighth century; and even if this be regarded as visionary, as it surely must be, the general consent of paleographers will hardly put it as late as the tenth century, I think; so that is one of the earliest cursive MSS. known. I noticed in turning the leaves, in many places, the handwriting of the Russian bishop, Porphyry. It is possible that he may have made a collation of it; one can only wish that some use might be made of such a splendid book in the new edition of the Septuagint, for which we are all waiting.

We might go on now to speak of the special Patristic features of the Library, and its rarities, and the unedited tracts which lie on its shelves. But perhaps enough has been said to serve as an introduction to the collection; and to go more into detail on this head would anticipate other statements that we hope to make by and by.

J. RENDEL HARRIS.

Jerusalem, 1 mo. 30, 1889.

MICROMETRICAL MEASUREMENTS

OF

DOUBLE STARS

AND

OTHER OBSERVATIONS

MADE AT THE

HAVERFORD COLLEGE OBSERVATORY

UNDER THE DIRECTION OF

F. P. LEAVENWORTH.



INTRODUCTION.

THE double star observations contained in the present publication were made at the Haverford College observatory chiefly during the year 1888. The objects consist principally of Burnham stars and Struve stars in which motion has been detected.

The Equatorial was made by Alvan Clark & Sons and mounted in 1883. The diameter of the object glass is ten inches. The adopted value of one revolution of the micrometer screw is $17''.333$. As very few of the distances measured are over $6''$, no temperature correction has been thought necessary. A magnifying power of 375 was used during the entire period. The defining power of the telescope is very good, no difficulty having been experienced in separating a half second double when the components were equal and the night good. The performance of the driving clock was poor, chiefly because there was no accurate way of regulating the speed.

Method of Observing.—In all the observations care was taken that the head should be kept erect, so that a line passing through the eyes should always be parallel to the horizon. In observing position angle four measures were usually taken; two with the motion of the tangent screw forward, and two with the motion backward. Two double distances were usually measured, unless the night was poor, when more were taken. The sidereal time of the observation was recorded and an estimation made of the magnitude of the components. The value of the observation was usually estimated on a scale of 5. Bright wire illumination was used, except in a few cases where bright doubles were observed in daylight, or with bright field. Such observations are distinguished by asterisks.

Personal Equation.—An approximate value of the personal error has been derived by a comparison of the present obser-

vations with those made by other observers during the last fifteen years. The mean results of eleven catalogues have been compared separately with my results, only those stars being rejected whose motion is rapid, or not approximately known. Where motion was known a correction has been applied to reduce the two measures to the same epoch. For determining the personal error depending on the angle with the vertical, the compared measures were divided into four groups, such that the means of the angles were respectively 0° , 45° , 90° , 135° . Again they were divided into four groups, such that the means of the angles should fall half way between the above places. The table below gives the results of the comparisons. The mean of Cincinnati publications IV, V and VI has been taken and given a weight of two, because they are the work of two observers. Each quantity is the mean of between five and twenty-five comparisons. The means of the distances of the double stars compared differ but little from $2''.0$. The following table gives the comparisons in full for each catalogue compared.

	0° ° //	22½° ° //	45° ° //	67½° ° //	90° ° //	112½° ° //	135° ° //	157½° ° //
L-Tar	-0.4 -0.03	+0.1 +0.09	+1.3 +0.04	-0.3 . . .	-1.6 -0.12	-1.2 -0.09	+0.1 +0.03	-0.1 -0.03
L-Per	+1.0 -0.01	+1.4 -0.03	+2.5 -0.04	+2.3 +0.02	+0.5 +0.03	-0.4 +0.02	-0.2 -0.09	+0.3 -0.09
L-De	+1.9 +0.14	+2.0 +0.06	+0.8 -0.03	+0.8 -0.04	+0.7 -0.06	-0.9 -0.10	+0.3 -0.02	+1.5 +0.08
L-Hall	-0.2 +0.02	+0.8 0.00	+1.6 0.00	+1.5 -0.05	+1.7 -0.01	+0.1 +0.04	-0.2 -0.02	-0.1 0.00
L-Mor	+0.7 -0.03	+0.9 -0.03	+1.9 -0.08	+1.8 -0.04	+1.2 -0.02	+1.2 +0.01	+0.8 -0.06	+0.4 -0.05
L-Sp	+1.1 -0.05	+1.2 -0.05	+1.7 -0.05	+1.4 -0.03	+0.3 +0.03	-0.8 +0.15	+1.0 +0.07	+1.6 -0.02
L-Cin	+0.9 +0.04	+1.2 +0.02	+2.2 -0.03	+1.9 -0.02	+0.7 -0.06	-0.3 -0.06	+0.7 +0.01	+1.3 +0.02
L-Cin	+0.9 +0.04	+1.2 +0.02	+2.1 -0.03	+1.9 -0.02	+0.7 -0.06	-0.3 -0.06	+0.8 +0.01	+1.3 +0.01
L-β	-0.2 0.00	-0.8 +0.02	+0.4 -0.02	+1.2 -0.02	+0.6 -0.05	-0.6 +0.07	+0.3 -0.06	+1.0 -0.05
Mean	+0.6 +0.01	+0.9 +0.01	+1.6 -0.03	+1.4 -0.02	+0.5 -0.04	-0.4 0.00	+0.4 -0.01	+0.8 -0.01

If we call the mean of the personal errors of these observers zero, the mean results of the table represent my personal error. Let e represent this error and v the angle with the vertical; the above errors in position angle are fairly well represented by the formula

$$e = +0.5 + 1.06 \sin v - 1.44 \sin \frac{3}{2}v + 1.64 \sin 2v.$$

the greatest difference being at $112^{\circ}\frac{1}{2}$, where the computed personal error is 0.0 . With the aid of this formula a table was constructed, from which the personal error has been taken and applied to each individual observation. A similar table was made to represent the error in distance which was also applied to each observation.

For determining the change in personal error due to difference in distance, the comparisons were divided into two groups, according as their distances were greater or less than $1.''9$. The resulting means show that for small distances the personal error is independent of the distance.

	''	°	''	''	°	''
L—Tar	1.2	+0.4	-0.03	2.7	-0.8	0.00
L—Per	1.1	+1.8	-0.03	2.7	+0.6	-0.02
L—De	1.2	+1.3	0.00	3.2	+0.8	+0.04
L—Hall	1.2	+0.4	+0.08	3.3	+0.8	-0.10
L—Mor	1.6	+0.9	-0.03	3.8	+1.3	-0.07
L—Sp	1.2	+0.7	-0.01	2.9	+1.1	0.00
L—Cin	1.3	+0.8	-0.03	3.6	+1.1	+0.03
L—Cin	1.3	+0.8	-0.03	3.6	+1.0	+0.02
L— β	1.0	0.0	-0.02	2.8	+0.6	-0.03
Mean	1.2	+0.8	-0.01	3.2	+0.7	-0.01

The number of observations made by Mr. Gummere was not sufficient to determine his personal error in the same manner. Instead, his observations were compared with mine and my error subtracted from the results. The remainders

were considered to be his personal error. The results of the process are shown in the following table:

v	L		L—G		G	
°	°	"	°	"	°	"
0	+0.6	+0.01	+1.4	0.00	—0.8	+0.01
22½	+0.9	+0.01	+3.5	—0.05	—2.6	+0.06
45	+1.6	—0.03	+2.7	—0.11	—1.1	+0.08
67½	+1.4	—0.02	+1.0	—0.15	+0.4	+0.13
90	+0.5	—0.04	+1.4	—0.07	—0.9	+0.03
112½	—0.4	0.00	+1.8	—0.03	—2.2	+0.03
135	+0.4	—0.01	+0.7	—0.06	—0.3	+0.05
157½	+0.8	—0.01	+0.7	—0.04	+0.1	+0.03

Column four was tabulated and applied to all of Mr. Gummere's measures.

Arranged according to distance L—G becomes:

D	L—G
"	° "
1.4	+1.4 —0.06
3.3	+1.2 —0.06

which shows that for small distances Mr. Gummere's personal error also is independent of the distance.

The remaining observers, with the exception of Mr. Quimby, are members of the class in Practical Astronomy. Their observations have been given a weight of 1, without corrections for personal error.

Accuracy of Observation.—The probable error of a single observation was computed by the formula

$$e = 0.845 \frac{\text{sum } (v)}{\sqrt{n(n-1)}}$$

where n is the number of observations made on a single star by the same observer, and v the differences between the individual measures and the arithmetical mean. Measures with a weight 1 were not included: the remainder were given equal weight.

PROBABLE ERRORS OF A SINGLE OBSERVATION.

Mean of Distances	$\sqrt{n(n-1)}$	e	$\sqrt{n(n-1)}$	\hat{e}
//		°		//
0.73	83.1	1.83	57.1	0.051
1.33	147.1	0.93	109.7	0.068
3.03	139.7	0.73	120.1	0.098
6.24	34.1	0.73	29.9	0.071

ABBREVIATIONS.

β denotes Burnham.

Cin	"	Cincinnati Observatory Publications.
A.C.	"	Alvan Clark.
De	"	Dembowski.
H.C.	"	Harvard College.
H	"	Sir William Herschel.
h	"	Sir John Herschel.
H.A.H.	"	H. A. Howe.
Mor	"	Morrison Observatory Publication.
F.P.L.	"	F. P. Leavenworth.
O.M.M.	"	O. M. Mitchel.
Per	"	Perrotin.
Sp	"	Schiaparelli.
Schj	"	Schjellerup.
S	"	South.
Sh	"	South and Herschel.
O.S.	"	Ormond Stone.
Σ	"	Struve.
O Σ	"	Otto Struve.
Tar	"	K. J. Tarrant.
*	"	Bright field illuminations.

OBSERVERS AND ABBREVIATIONS.

B	denotes	R. C. Banes.
C	"	E. M. Cox.
Lw	"	D. C. Lewis.
O	"	W. F. Overman.
P	"	F. W. Peirson.
S	"	L. M. Stevens.
T	"	L. W. Todhunter.
Q	"	A. W. Quimby.
G	"	H. V. Gummere.
L	"	F. P. Leavenworth.

ARRANGEMENT OF COLUMNS.

Column 1 gives the date of observation.

Columns 2 and 3 contain the uncorrected position angles and distances.

Columns 4 and 5 contain the position angles and distances corrected for personal error.

Column 6 gives the estimated weight of an observation on a scale of 5.

Column 7 gives the estimated magnitudes.

Column 8 gives the sidereal time of the observation to the nearest tenth of an hour.

Column 9 gives the name of the observer.

In taking the arithmetical mean the measures were given the weights found in the sixth column.

The Right Ascensions and Declinations are for the year 1890.

O. S. 51 0^h 4^m: — 14° 48'.

	^o	"	^o	"					^h	
1887.974	107.8	9.94	108.1	9.95	1	8.5	. .	8.7	...	L

 β 391 0^h 4^m: — 28° 36'.

1888.833	273.6	0.91	272.7	0.94	4	6.0	. .	6.1	1.2	L
8.839	273.8	0.87	273.5	0.90	4	6.0	. .	6.1	0.3	L
8.959	272.9	...	272.6	...	2	...	. .	...	0.1	L
8.973*	273.8	0.99	273.2	1.02	2	6.0	. .	6.0	0.8	L
8.833	270.1	...	270.8	...	4	6.2	. .	6.2	0.4	G
8.973*	91.5	...	92.2	...	2	6.2	. .	6.0	0.4	G

1888.88			272.5	0.94		6.1	. .	6.1		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 β 1015 0^h 15^m: + 11° 42'.

1888.560	114.8	0.59	114.8	0.59	3	8.0	. .	8.0	23.7	L
----------	-------	------	-------	------	---	-----	-----	-----	------	---

No other measures.

 β 395 0^h 31^m: — 25° 23'.

1888.839	108.2	0.67	108.5	0.68	4	6.0	. .	6.4	0.6	L
8.893	106.3	0.64	106.6	0.65	2	6.0	. .	6.5	0.8	L
8.997	114.6	...	114.6	...	2	...	. .	...	1.2	L

1888.89			109.6	0.67		6.0	. .	6.4		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 β 494 0^h 41^m: — 1° 51'.

1888.560	170.6	1.26	170.0	1.25	3	8.0	. .	8.0	0.0	L
8.726	173.6	1.32	172.9	1.32	2	8.4	. .	8.6	0.5	L
8.869	171.3	1.24	171.7	1.21	2	8.4	. .	8.5	0.7	G
8.891	168.1	1.33	168.5	1.30	3	8.3	. .	8.4	0.7	G

1888.76			170.5	1.27		8.3	. .	8.4		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 Σ 67 0^h 46^m: + 10° 0'.

1888.740	4.4	1.71	3.7	1.70	2	8.0	. .	8.4	0.4	L
----------	-----	------	-----	------	---	-----	-----	-----	-----	---

 Σ 73 0^h 49^m: + 23° 2'.

1888.505*	7.6	1.19	6.1	1.21	2	5.7	. .	6.2	22.0	L
-----------	-----	------	-----	------	---	-----	-----	-----	------	---

β 867 0^h 54^m: + 11° 20'.

	^o	["]	^o	["]					^h	
1888.997	173.0	0.98	172.2	0.98	3	8.0	. .	9.0	1.6	L

 β 234 0^h 55^m: — 17° 40'.

1887.952	152.8	4.51	152.0	4.52	3	8.5	. .	8.5	. .	L
8.006	153.2	4.97	152.4	4.98	2	...	. .	...	1.2	L

1887.97			152.2	4.70		8.5	. .	8.5		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 Σ 91 1^h 2^m: — 2° 20'.

1888.031	322.4	4.22	321.8	4.23	2	6.8	. .	7.5	1.3	L
8.798	321.3	3.88	320.7	3.89	2	7.0	. .	7.4	0.9	L

1888.41			321.2	4.06		6.9	. .	7.4		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 Σ 113 1^h 14^m: — 1° 5'.

1887.938	348.7	1.57	348.0	1.57	3	6.5	. .	7.0	1.0	L
8.039	351.6	1.43	351.0	1.43	2	6.5	. .	7.0	1.5	L
8.740	348.7	1.54	348.0	1.54	2	6.0	. .	6.7	1.2	L
8.872	350.8	1.53	351.0	1.49	4	6.5	. .	7.5	1.6	G

1888.44			349.6	1.51		6.4	. .	7.0		
---------	--	--	-------	------	--	-----	-----	-----	--	--

h 2036 1^h 15^m: — 16° 23'.

1888.726	200.9	1.81	200.0	1.80	2	7.0	. .	7.0	1.3	L
8.740	202.3	1.59	201.2	1.59	2	6.8	. .	7.0	0.9	L
8.798	198.8	1.72	198.0	1.71	2	7.0	. .	7.0	1.5	L

1888.75			199.7	1.70		6.9	. .	7.0		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 β 4 1^h 15^m: + 10° 58'.

1888.833	63.8	0.4e	62.3	0.4	4	7.0	. .	7.0	1.5	L
8.839	52.2	0.43	50.7	0.45	4	7.3	. .	7.3	1.1	L
8.869	67.2	0.4e	65.7	0.4	3	7.0	. .	7.0	1.9	L

1888.84			59.0	0.43		7.1	. .	7.1		
---------	--	--	------	------	--	-----	-----	-----	--	--

Very difficult. Probably unchanged.

Secchi 1^h 18^m: — 24° 56'.

	°	"	°	"					h	
1888.896	81.8	3.06	81.9	2.98	2	7.5	. .	9.5	1.6	G
9.030	80.0	. . .	80.3	. . .	2	7.5	. .	10.0	1.3	G
1888.96			81.1	2.98		7.5	. .	9.8		

Σ 138 1^h 30^m: + 7° 3'.

1887.998	215.4	1.56	214.0	1.57	4	7.0	. . .	7.0	1.4	L
8.704*	216.2	1.48	214.8	1.49	3	7.0	. .	7.2	1.4	L
8.726	216.9	1.72	215.5	1.73	2	7.0	. .	7.0	1.5	L
8.891	30.3	1.72	32.4	1.65	4	7.1	. .	7.0	1.5	G
1888.55			213.9	1.60		7.0	. .	7.0		

h 3447 1^h 31^m: — 30° 28'.

1888.970	90.7	2.18	90.0	2.21	3	6.0	. .	7.4	2.0	L
9.011	88.4	2.45	87.9	2.48	2	6.0	. .	7.4	1.4	L
1888.99			89.2	2.32		6.0	. .	7.4		

Slow direct motion.

β 5 1^h 33^m: + 16° 4'.

1888.973*	292.9	1.14	293.0	1.15	2	7.0	. .	9.0	1.1	L
9.050	290.8	. . .	292.6	. . .	2	6.8	. .	9.5	1.8	G
1889.01			292.8	1.15		6.9	. .	9.2		

Σ 147 1^h 35^m: — 11° 52'.

1888.959	89.6	3.33	90.3	3.28	2	6.2	. .	7.2	1.8	G
9.025	88.6	3.29	89.7	3.26	3	6.2	. .	7.0	1.3	G
1889.00			89.9	3.27		6.2	. .	7.1		

Σ 155 1^h 38^m: + 8° 54'.

1888.014	329.9	4.69	329.2	4.70	2	7.0	. .	7.2	1.9	L
9.055	329.4	. . .	329.2	. . .	2	. . .	. .	. . .	2.4	L
9.044	328.1	4.82	328.4	4.77	2	. . .	. .	. . .	2.1	G
1888.70			328.9	4.74		7.0	. .	7.2		

β 6 1^h 39^m: — 7° 19'.

	^o	"	^o	"				^h	
1887.979	171.2	...	170.5	...	1	7.0	..	10.0	...
8.031	166.8	2.82	166.1	2.82	1	6.5	..	10.0	1.5
8.970	167.9	2.61	167.2	2.61	4	7.2	..	8.7	1.7
1888.65			167.6	2.65		6.9	..	9.6	

 β 871 1^h 42^m: — 1° 30'.

1887.998	351.4	...	350.7	...	1	...	..	...	...
8.006	353.4	1.98	352.7	1.98	2	8.0	..	9.5	1.8
8.740	352.7	1.96	352.0	1.96	2	8.2	..	9.4	1.6
1888.30			352.0	1.97		8.1	..	9.4	

 β 259 1^h 47^m: — 10° 16'.

1888.929	240.8	...	239.4	...	2	8.0	..	10.5	1.6
9.008	241.5	4.50	240.0	4.52	2	8.0	..	10.4	2.1
1888.97			239.7	4.52		8.0	..	10.4	

 Σ 202 1^h 56^m: + 2° 13'.

1888.039*	322.2	3.03	321.4	3.03	3	3.0	..	3.7	0.9
8.053*	322.2	3.04	321.4	3.04	2	4.0	..	4.5	1.2
8.058*	323.1	3.18	322.3	3.19	2	3.0	..	4.0	1.5
8.091	322.3	2.79	322.0	2.80	2	4.0	..	4.8	2.3
9.055*	320.2	2.96	319.4	2.97	1	4.0	..	4.6	1.4
9.053	322.1	3.25	322.2	3.20	2	4.5	..	5.0	1.8
9.060*	323.0	3.32	323.0	3.28	2	...	..	...	1.1
1888.42			321.8	3.08		3.8	..	4.4	

 β 516 2^h 0^m: — 1° 30'.

1888.833	283.1	0.73	283.3	0.75	4	8.0	..	8.5	2.0
8.839	282.1	0.57	282.5	0.58	3	7.7	..	8.5	1.5
8.893	281.4	0.70	281.6	0.72	2	...	..	...	1.9
1888.85			282.6	0.69		7.8	..	8.5	

 Σ 218 2^h 3^m: — 0° 58'.

1888.726	250.3	4.64	248.9	4.66	3	7.0	..	8.0	2.2
9.025*	249.3	4.87	248.0	4.89	3	7.4	..	8.0	2.1
1888.88			248.4	4.78		7.2	..	8.0	

Probably fixed.

		Hastings 2 ^h		11 ^m : — 18° 44′					
	°	″	°	″				h	
1887.952	339.9	2.12	339.1	2.12	3	8.0	.. 8.8	2.2	L
7.998	339.8	2.25	339.0	2.25	2	8.5	.. 9.0	2.1	L
8.039	340.5	2.17	339.7	2.17	2	8.5	.. 9.5	2.3	L
8.740	340.3	2.18	339.5	2.18	3	8.0	.. 8.8	2.1	L
8.833	340.8	2.07	340.0	2.07	4	8.2	.. 8.6	2.3	L
9.011	340.4	2.37	339.6	2.37	3	8.2	.. 8.6	2.0	L
9.025	339.6	2.12	338.8	2.12	3	8.3	.. 9.0	2.5	L
9.030	338.1	...	338.4	...	2	8.5	.. 8.7	1.7	G
9.066	342.8	2.32	342.7	2.27	2	8.5	.. 9.0	2.7	G

1888,66	339,6	2,18	8,3	8,9
---------	-------	------	-----	-----

In rapid motion. The earliest measure is
1879.92 311.08 2.''22 Hall.

β 8 2 ^h 15 ^m : + 8° 23'.										
1888.869	208.2	1.09	207.1	1.09	4	7.7	. .	9.0	2.2	L
8.891	207.3	1.04	206.2	1.04	3	8.0	. .	9.0	2.2	L
8.984	206.1	. . .	204.6	. . .	2	8.0	. .	9.0	0.5	L
8.995	204.8	1.08	203.6	1.08	3	8.0	. .	9.6	2.0	L
9.033	206.9	. . .	205.9	. . .	2	7.7	. .	9.0	2.4	L
8.970	200.8	1.10	202.8	1.06	2	8.0	. .	9.2	2.6	G
8.995	202.6	1.11	203.1	1.08	4	8.0	. .	8.7	3.8	G
9.033	201.9	. . .	204.1	. . .	2	. . .	. .	. . .	2.0	G
9.063	203.2	. . .	205.2	. . .	2	8.2	. .	9.0	2.6	G

1888.97	204.8	1.07	8.0	9.1
---------	-------	------	-----	-----

H. A. H. 3 2^h 26^m; — 8° 2′.

1888.984* 212.0 . . . 210.5 . . . 2 9.3 . . . 9.6 0.8 L

H 652 2 ^h 27 ^m : + 9° 6'.										
1888.014	316.5	4.73	316.3	4.74	2	9.3	. .	9.6	2.7	L

		Σ 295	2^h	$36^m; -1^\circ$	$10'$				
1887.995	325.2	4.32	324.4	4.32	1	6.0	. . 10.0	1.6	L
9.030	323.0	4.23	322.3	4.24	2	6.0	. . 9.3	2.5	L

1888,68	323,0	4,27	6,0	, ,	9,6
---------	-------	------	-----	-----	-----

		Σ	299	2 ^h	38 ^m :	+	2 ^o	46'.			
1888.058*	288.7	3.26	288.9	3.27	2	4.0	. . .	7.5	2.0	L	
8.091*	290.7	2.84	291.1	2.85	2	4.0	. . .	7.5	2.7	L	
8.102*	292.6	3.07	292.9	3.08	2	4.0	. . .	7.5	2.7	L	
8.108*	291.9	. . .	292.3	. . .	4	. . .	. . .	. . .	2.8	L	
9.082	289.4	2.89	291.1	2.87	2	4.2	. . .	7.0	2.9	G	
9.088*	287.5	3.09	289.4	3.06	2	4.2	. . .	7.5	2.6	G	

1888.38	291.2	3.03	4.1	7.4
---------	-------	------	-----	-----

	β	83	2 ^h	40 ^m : —	5°	25'.			
	^o	"	^o	"				^h	
1888.869	110.1	1.0e	110.4	...	3	7.8	. . 10.0	2.5	L
8.872	108.2	0.99	108.6	1.01	4	7.8	. . 9.7	2.8	L
1888.87			109.4	1.01		7.8	. . 9.8		

Slow retrograde motion probable.

	Σ	305	2 ^h	41 ^m : +	18°	56'.			
1888.921	137.5	...	136.9	...	1	...	. . . . .	0.8	L

	Σ	333	2 ^h	53 ^m : +	20°	53'.			
1888.560*	202.2	1.09	201.0	1.11	3	5.6	. . 5.9	0.6	L
8.984*	202.3	1.24	201.2	1.27	2	5.5	. . 6.0	0.1	L
9.036	202.7	1.24	201.2	1.26	3	6.0	. . 6.6	1.5	L
9.126*	201.4	...	202.2	...	2	5.5	. . 6.0	3.7	G
9.142*	202.8	1.39	204.4	1.31	2	6.0	. . 6.2	2.4	G
1888.94			201.8	1.23		5.7	. . 6.1		

	Σ	334	2 ^h	53 ^m : +	6°	11'.			
1888.929	319.0	1.34	319.4	1.35	2	...	. . . . .	4.5	L
9.050	316.8	...	316.0	...	2	7.5	. . 7.8	2.2	L
1888.99			317.7	1.35		7.5	. . 7.8		

	β	11	2 ^h	57 ^m : —	8°	8'.			
1888.053	84.7	...	84.5	...	2	6.0	. . 10.3	2.3	L

	Σ	355	3 ^h	2 ^m : +	7°	58'.			
1888.058	150.6	...	149.8	...	1	8.6	. . 9.3	3.2	L

	β	528	3 ^h	3 ^m : —	4°	1'.			
1889.025	198.2	...	197.3	...	2	8.5	. . 8.6	3.0	L

	Σ	357	3 ^h	3 ^m : —	13°	0'.			
1888.031	297.4	8.51	297.6	8.52	1	8.5	. . 9.3	2.7	L

	Σ	367	3 ^h	8 ^m : +	0°	20'.			
1888.039	230.1	0.85	228.5	0.87	4	7.2	. . 7.6	3.2	L
8.091	232.2	0.77	230.6	0.79	3	7.5	. . 7.5	3.4	L
1888.06			229.4	0.84		7.4	. . 7.6		

β 84 3^h 11^m: — 6° 20'.

	^o	"	^o	"					^h	
1888.893	22.1	0.45e	21.3	0.45	2	6.0	. .	7.0	3.8	L
8.997	22.6	0.66	21.7	0.65	2	6.8	. .	8.4	3.3	L
1888.94			21.5	0.58		6.4	. .	7.7		

 Σ 376 3^h 14^m: + 19° 21'.

1889.071	252.2	7.06	252.6	7.00	3	7.4	. .	7.4	2.8	G
9.088	250.5	7.15	250.5	7.07	2	7.7	. .	7.7	3.0	G
1889.08			251.8	7.03		7.6	. .	7.6		

 β 12 3^h 19^m: — 14° 33'.

1887.998	273.9	2.13	273.8	2.15	2	7.0	. .	9.5	3.1	L
8.891	270.8	2.44	271.8	2.41	3	7.5	. .	9.5	3.2	G
1888.53			272.6	2.31		7.2	. .	9.5		

 Σ 408 3^h 25^m: — 4° 38'.

1889.025	337.2	1.35	336.4	1.35	2	8.0	. .	8.0	3.3	L
8.896	336.0	1.55	336.3	1.52	2	8.2	. .	8.4	2.8	G
9.090	337.4	. . .	337.4	. . .	2	8.2	. .	8.3	3.5	G
1889.00			336.7	1.44		8.1	. .	8.2		

 $F. P. L.$ 3^h 39^m: — 13° 45'.

1888.872	358.8	1.21	358.2	1.20	2	8.3	. .	10.3	3.7	L
8.997	359.6	0.96	359.0	0.95	2	8.3	. .	10.0	3.9	L
1888.93			358.6	1.08		8.3	. .	10.2		

The only other measure is 1887 \pm 0.^o6 1.'/11 L.

 h 1408 3^h 45^m: — 37° 57'.

1888.644*	205.0	7.28	203.8	7.28	1	. . .	. . .	. . .	3.3	L
9.090*	203.1	7.48	205.4	7.42	2	4.5	. .	4.8	3.7	G
9.107*	204.0	7.35	206.0	7.28	2	. . .	. .	. . .	3.2	G
1889.01			205.3	7.34		4.5	. .	4.8		

 Σ 493 4^h 1^m: + 5° 24'.

1888.896	93.6	1.54	93.2	1.57	3	8.4	. .	8.8	4.1	L
9.025	93.6	1.81	93.7	1.83	2	8.6	. .	9.0	3.7	L
1888.95			93.4	1.67		8.5	. .	8.9		

β 547 4 ^h 8 ^m : + 9° 0′.									
	^o	^h	^o	^h				^h	
1889.107	351.0	1.0e	350.3	...	2	5.0	..	8.0	L
Σ 516 4 ^h 9 ^m : — 10° 32′.									
1888.121*	148.9	6.62	148.1	6.62	2	...	..	...	L
8.954	151.0	6.43	150.2	6.44	2	6.0	..	8.0	L
9.030	149.6	6.88	149.6	6.88	1	...	..	...	B
1888.64			149.3	6.60		6.0	..	8.0	
Σ 535 4 ^h 17 ^m : + 11° 6′.									
1888.110	335.2	...	334.4	...	1	7.2	..	8.5	L
8.121	334.3	1.38	333.5	1.38	2	7.0	..	8.3	L
9.008	334.5	...	333.7	...	2	7.0	..	8.0	L
1888.47			333.8	1.38		7.1	..	8.3	
Σ 544 4 ^h 20 ^m : — 9° 0′.									
1888.031	352.9	2.87	352.3	2.86	2	8.0	..	8.4	L
8.056	353.7	...	353.0	...	1	8.0	..	8.8	L
1888.04			352.5	2.86		8.0	..	8.6	
β 403 4 ^h 20 ^m : — 2° 18′.									
1888.091	96.7	1.93	96.8	1.95	2	7.0	..	10.0	L
8.102	100.0	1.98	100.2	1.99	2	7.0	..	8.5	L
8.973*	96.5	1.93	97.8	1.91	2	7.0	..	9.0	G
1888.39			98.3	1.95		7.0	..	9.2	
β 184 4 ^h 23 ^m : — 21° 44′.									
1889.025	262.5	...	261.7	...	2	...	..	...	L
8.995	260.2	1.16	260.4	1.08	4	6.5	..	7.2	G
9.033	262.9	1.27	263.2	1.19	2	6.5	..	7.0	G
1889.01			261.4	1.12		6.5	..	7.1	
Σ 589 4 ^h 39 ^m : + 5° 5′.									
1888.053	298.5	4.44	298.8	4.45	3	8.0	..	8.3	L
8.149	299.5	4.30	299.7	4.31	2	8.0	..	8.3	L
1888.09			299.2	4.39		8.0	..	8.3	

β 186 4 ^h 41 ^m : — 7° 11'.									
	°	"	°	"				h	
1888.039	176.5	1.90	175.8	1.90	2	7.0	. .	9.5	5.0 L
8.970	175.7	1.65	176.4	1.63	2	7.5	. .	9.0	4.6 G
1888.50			176.1	1.76		7.2	. .	9.2	

β 316 4 ^h 47 ^m : — 5° 28'.									
1888.102	179.5	1.13	178.9	1.12	3	8.2	. .	8.4	4.5 L
8.997	179.5	1.18	178.9	1.17	3	7.5	. .	7.7	4.8 L
8.973*	179.6	1.14	180.3	1.12	2	8.2	. .	8.2	4.9 G
1888.66			179.2	1.14		8.0	. .	8.1	

$O \Sigma$ 91 4 ^h 50 ^m : + 3° 1'.									
1889.063	234.9	0.67	233.5	0.69	2	6.0	. .	6.5	4.6 L
9.033	236.8	0.94	237.5	0.84	2	6.8	. .	7.3	5.2 G
9.085	237.3	0.97	237.5	0.86	2	6.0	. .	6.5	4.9 G
1889.06			236.2	0.80		6.3	. .	6.8	

β 404 4 ^h 50 ^m : + 8° 59'.									
1888.121	288.8	...	289.1	...	2	8.8	. .	8.8	4.4 L
8.893*	290.7	...	291.0	...	2	...	. .	...	4.6 L
9.066	294.6	1.50	294.7	1.52	2	8.8	. .	9.0	5.4 L
1888.69			291.6	1.52		8.8	. .	8.9	

Σ 622 4 ^h 52 ^m : + 1° 30'.									
1888.028	174.4	2.68	173.7	2.68	2	8.0	. .	8.4	5.3 L

Σ 636 4 ^h 58 ^m : — 8° 49'.									
1889.088	98.1	...	98.3	...	2	...	. .	...	3.7 L

$O \Sigma$ 98 5 ^h 2 ^m : + 8° 21'.									
1888.121	195.0	...	194.0	...	1	...	. .	...	4.6 L
8.893	192.8	1.05	192.0	1.04	2	6.0	. .	7.0	5.0 L
9.025	195.8	1.03	194.4	1.04	2	5.8	. .	7.3	4.1 L
9.036	194.1	0.93	193.4	0.92	4	6.5	. .	7.5	5.2 L
1888.90			193.4	0.98		6.1	. .	7.3	

β 885 5^h 5^m: — 1° 54'.

	^o	"	^o	"					^h	
1888.833	192.9	0.65	192.2	0.64	4	8.0	. .	9.0	5.4	L
8.997	189.9	0.67	189.2	0.66	4	8.0	. .	8.3	5.2	L

1888.92			190.7	0.65		8.0	. .	8.6		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 $O. S. 5^h 18^m: - 10^\circ 31'.$

1888.102	119.5	1.05	119.6	1.06	3	8.2	. .	8.4	5.1	L
8.997	119.2	1.12	119.5	1.13	4	8.0	. .	8.2	5.4	L

1888.61			119.5	1.10		8.1	. .	8.3		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 $Da. 5^h 19^m: - 2^\circ 30'.$

1888.039	84.7	1.24	83.8	1.27	3	4.0	. .	5.5	5.5	L
9.082	85.1	1.03	84.3	1.06	2	4.0	. .	5.5	5.4	L
9.085	82.3	1.42	82.5	1.34	3	4.5	. .	5.5	5.4	G

1888.69			83.4	1.24		4.2	. .	5.5		
---------	--	--	------	------	--	-----	-----	-----	--	--

 β 320 5^h 24^m: — 20° 51'.

1889.066	292.7	2.82	293.0	2.83	2	3.0	. .	9.0	5.8	L
----------	-------	------	-------	------	---	-----	-----	-----	-----	---

 Σ 734 5^h 29^m: — 1° 46'.

1888.039	357.6	2.28	356.8	2.28	1	7.0	. .	10.0	6.5	L
9.063	354.5	1.82	354.9	1.79	2	7.2	. .	8.3	5.7	G

1888.72			355.5	1.95		7.1	. .	9.2		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 β 89 5^h 32^m: — 1° 30'.

1888.102	359.8	0.95	359.1	0.95	3	8.0	. .	9.4	5.8	L
8.833	1.6	0.83	0.9	0.83	4	8.0	. .	9.2	6.0	L

1888.52			0.1	0.88		8.0	. .	9.3		
---------	--	--	-----	------	--	-----	-----	-----	--	--

Supposed motion not confirmed.

 β 321 5^h 34^m: — 17° 55'.

 $A: a.$

1888.869*	141.2	0.79	140.8	0.80	4	7.0	. .	8.8	5.9	L
9.036	142.4	0.67	142.0	0.68	2	7.2	. .	8.0	6.0	L

1888.92			141.2	0.76		7.1	. .	8.4		
---------	--	--	-------	------	--	-----	-----	-----	--	--

C: c.									
	^o	"	^o	"				^h	
1888.869*	359.1	1.42	358.4	1.42	3	8.5	. .	8.8	6.1 L
9.036	0.1	1.37	359.4	1.36	2	8.5	. .	9.2	6.4 L

1888.94			358.8	1.40		8.5	. .	9.0	
---------	--	--	-------	------	--	-----	-----	-----	--

Σ 774 5^h 35^m: — 2° 1'.

1889.033	153.6	2.66	153.8	2.61	2	2.0	. .	5.5	6.3 G
9.080	153.7	2.65	153.7	2.61	2	...	. .	...	5.5 G
9.030	157.9	2.97	157.9	2.97	1	...	. .	...	... P
9.036	155.6	2.63	155.6	2.63	1	...	. .	...	... P
9.041	155.7	2.63	155.7	2.63	1	...	. .	...	... P
9.036	154.9	2.88	154.9	2.88	1	...	. .	...	... Lw
9.066	154.5	3.13	154.5	3.13	1	...	. .	...	... Lw
9.041	154.9	3.02	154.9	3.02	1	...	. .	...	... T
9.055	160.9	3.06	160.9	3.06	1	...	. .	...	... T
9.066	154.7	2.99	154.7	2.99	1	...	. .	...	... S
9.030	154.9	2.65	154.9	2.65	1	...	. .	...	... O

1889.04			155.3	2.80		2.0	. .	5.5	
---------	--	--	-------	------	--	-----	-----	-----	--

β 94 5^h 45^m: — 14° 31'.

1888.053	179.5	2.92	178.9	2.91	2	6.0	. .	8.8	5.8 L
8.058	179.4	2.80	178.7	2.79	2	6.0	. .	8.5	5.3 L
8.130	179.6	2.77	178.9	2.76	2	6.0	. .	8.0	5.5 L

1888.08			178.8	2.82		6.0	. .	8.4	
---------	--	--	-------	------	--	-----	-----	-----	--

h 3823 5^h 56^m: — 31° 3'.

1888.130	115.8	3.08	116.1	3.09	2	8.6	. .	8.8	6.1 L
8.149	294.2	2.97	294.5	2.98	2	8.7	. .	8.4	5.9 L

1888.14			295.3	3.04		8.6	. .	8.6	
---------	--	--	-------	------	--	-----	-----	-----	--

β 16 5^h 57^m: — 10° 36'.

1888.997	354.7	2.07	354.0	2.06	4	5.0	. .	8.0	5.9 L
9.071	355.3	1.86	354.6	1.85	2	5.0	. .	9.3	6.0 L
8.973*	353.3	1.60	353.8	1.57	2	5.0	. .	8.5	6.0 G
9.085	352.5	...	353.0	...	2	6.0	. .	11.0	5.9 G

1889.02			353.9	1.88		5.2	. .	9.2	
---------	--	--	-------	------	--	-----	-----	-----	--

β 17 6^h 3^m: — 11° 8'.

A: B.

	^o	"	^o	"				^h	
1889.129	180.2	3.06	179.6	3.05	2	7.0	. . 10.5	5.8	L
9.142	180.1	2.98	179.5	2.97	2	6.3	. . 10.4	6.1	L
1889.14			179.6	3.01		6.6	. . 10.4		

 β 323 6^h 9^m: — 1° 41'.

1889.063	97.2	2.13	96.5	2.16	2	8.0	. . 10.0	6.8	L
9.126	96.5	2.32	96.6	2.34	2	8.0	. . 9.4	6.0	L
9.011	96.1	2.29	97.5	2.27	2	8.0	. . 9.5	6.0	G
1889.07			96.9	2.26		8.0	. . 9.6		

 β 97 6^h 19^m: — 1° 21'.

1889.129	262.8	1.0e	262.2	...	2	7.0	. . 9.0	6.1	L
9.142	260.7	0.91	259.6	0.93	2	7.3	. . 8.8	6.7	L
1889.14			260.9	0.93		7.2	. . 8.9		

 β 568 6^h 19^m: — 19° 43'.

1888.997	143.6	0.4e	142.9	0.4	3	7.0	. . 7.0	6.2	L
9.036	147.0	0.5e	146.3	0.5	2	7.0	. . 8.0	6.6	L
9.107	151.5	...	150.7	...	1	...	. . ...	...	L
9.156	154.9	0.79	154.1	0.80	3	7.0	. . 8.3	6.8	L
1889.07			148.3	0.63		7.0	. . 7.8		

 Σ 932 6^h 28^m: + 14° 50'.

1889.082	150.4	2.12	149.6	2.12	2	8.1	. . 8.0	6.1	L
8.891	331.5	2.14	331.6	2.09	2	8.0	. . 8.1	6.7	G
9.053	328.5	2.04	328.4	1.99	2	8.4	. . 8.5	6.4	G
9.080	328.8	...	328.8	...	2	8.3	. . 8.5	6.1	G
1889.02			329.6	2.07		8.2	. . 8.3		

 β 19 6^h 37^m: — 15° 54'.

1888.094	167.9	3.81	167.2	3.81	3	7.7	. . 9.2	6.6	L
8.108	167.1	3.63	166.4	3.63	2	7.8	. . 9.2	6.5	L
8.182	166.6	3.61	165.9	3.61	2	8.0	. . 9.7	6.5	L
1888.12			166.6	3.70		7.8	. . 9.4		

		β 20 6 ^h		44 ^m : — 16° 5'					
	^o	"	^o	"				^h	
1888.121	36.3	...	34.8	...	2	8.0	.. 10.3	6.3	L
8.130	35.3	...	33.9	...	1	8.0	.. 10.5	6.6	L
9.151	35.9	3.11	34.5	3.12	2	8.0	.. 11.0	6.6	L
1888.54			34.5	3.12		8.0	.. 10.6		

β 324 6^h 45^m: — 23° 56'.

A: B.

1889.011	206.1	1.82	205.1	1.81	2	7.0	.. 8.5	6.9	L
9.033	198.4	...	200.8	...	1	...	.. ...	6.7	G
9.066	200.8	1.68	202.9	1.64	3	7.2	.. 8.3	7.1	G
1889.04			203.3	1.71		7.1	.. 8.4		

Σ 982 6^h 48^m: + 13° 20'.

1889.041	163.1	6.40	163.3	6.36	4	5.5	.. 8.2	6.7	G
9.085	162.6	6.44	163.2	6.42	4	5.5	.. 7.8	6.3	G
1889.06			163.2	6.39		5.5	.. 8.0		

β 326 6^h 50^m: + 2° 27'.

1888.182	68.3	1.04	66.9	1.06	2	8.0	.. 9.2	7.1	L
8.833	65.0	1.01	63.9	1.03	4	8.0	.. 9.0	6.4	L
9.036	64.7	1.21	63.3	1.23	4	7.8	.. 9.2	6.9	L
9.082	67.3	1.18	66.1	1.20	2	8.0	.. 9.3	6.5	L
1888.83			64.5	1.13		8.0	.. 9.2		

Σ 997 6^h 51^m: — 13° 54'.

1888.970*	342.4	3.12	342.4	3.08	3	4.0	.. 7.5	7.1	G
9.126	342.2	3.10	342.4	3.07	2	5.7	.. 7.8	6.6	G
1889.03			342.4	3.08		4.8	.. 7.6		

β 327 6^h 53^m: — 2° 53'.

1888.094	97.3	0.71	97.1	0.74	4	8.0	.. 8.3	7.0	L
8.102	94.3	0.75	94.2	0.77	2	8.0	.. 8.0	6.8	L
1888.10			96.1	0.75		8.0	.. 8.2		

β 100 6^h 55^m: + 12° 34'.

	^o	"	^o	"					^h	
1888.187	258.9	3.21	258.3	3.24	2	8.0	. .	9.7	6.5	L
9.093	260.4	3.07	259.3	3.10	2	8.0	. .	11.0	7.1	L
1888.64			258.8	3.17		8.0	. .	10.4		

 Σ 1043 7^h 7^m: — 0° 30'.

1888.053	66.6	2.49	65.3	2.51	2	7.0	L
----------	------	------	------	------	---	-----	-----	-----	-----	---

 β 197 7^h 8^m: — 6° 58'.

1888.039	147.5	2.29	146.7	2.30	3	8.0	. .	9.7	7.0	L
8.108	150.3	2.05	149.5	2.06	2	8.2	. .	9.4	7.0	L
8.160	148.6	2.09	147.8	2.10	2	8.0	. .	9.2	7.1	L
1888.10			147.8	2.17		8.1	. .	9.4		

 β 575 7^h 10^m: — 15° 17'.

1889.156	200.8	0.71	199.9	0.70	2	8.0	. .	8.0	7.2	L
----------	-------	------	-------	------	---	-----	-----	-----	-----	---

H. A. H. 7^h 10^m: — 0° 26'.

1888.091	317.2	2.62	316.5	2.63	3	8.8	. .	9.0	6.7	L
8.130	313.8	2.24	313.3	2.25	2	8.4	. .	8.7	7.0	L
8.187	314.1	2.44	313.6	2.45	2	...	. .	...	7.0	L
8.187	313.7	...	313.7	...	1	...	. .	...	7.7	G
8.187	313.5	...	313.5	...	1	...	. .	...	7.7	C
1888.14			314.5	2.47		8.6	. .	8.8		

 $O \Sigma$ 170 7^h 12^m: + 9° 30'.

1888.121	111.1	1.52	111.3	1.53	3	7.8	. .	7.9	6.8	L
8.162	114.2	1.22	113.6	1.23	2	7.2	. .	7.4	5.9	L
8.190	107.3	1.28	107.7	1.29	3	7.0	. .	7.4	7.1	L
1888.16			110.5	1.36		7.3	. .	7.6		

 β 330 7^h 14^m: — 0° 42'.

1888.091	216.5	1.26	215.1	1.27	4	8.0	. .	9.5	7.2	L
9.063	218.1	1.13	216.7	1.14	2	8.0	. .	9.5	7.2	L
1888.42			215.6	1.23		8.0	. .	9.5		

Σ 1074 7^h 15^m: + 0° 37'.

	^o	"	^o	"				^h	
1888.094	137.6	0.84	137.3	0.85	3	7.8	. .	8.0	7.5 L
9.036	139.4	0.73	138.8	0.74	4	8.0	. .	8.4	7.2 L
9.066	144.4	0.97	144.7	0.92	2	7.5	. .	7.7	7.6 G
1888.73			139.6	0.82		7.8	. .	8.0	

Nova? 7^h 16^m: -- 19° 30'.

1889.112	129.2	1.95	129.1	1.96	2	9.0	. .	9.4	7.2 L
----------	-------	------	-------	------	---	-----	-----	-----	-------

 β 331 7^h 16^m: --24° 10'.

1889.151	112.1	. . .	112.5	. . .	1	8.0	. .	9.0	7.4 L
9.156	115.1	1.92	115.5	1.93	3	8.4	. .	8.8	7.6 L
1889.15			114.7	1.93		8.2	. .	8.9	

Nova? 7^h 20^m: -- 20° 47'.

1889.121	348.9	. . .	349.0	. . .	2	8.7	. .	9.0	7.9 G
9.142	348.4	4.22	348.7	4.19	2	8.5	. .	8.8	7.4 G
1889.13			348.8	4.19		8.6	. .	8.9	

 β 199 7^h 20^m: -- 20° 56'.

1889.085	22.2	1.77	21.4	1.76	2	7.8	. .	8.6	8.0 L
9.112	21.2	1.74	20.4	1.73	2	7.7	. .	8.0	7.6 L
9.107	19.5	. . .	21.8	. . .	1	7.2	. .	8.0	7.0 G
9.142	20.6	1.99	22.4	1.95	3	7.7	. .	8.3	8.0 G
1889.12			21.6	1.84		7.6	. .	8.2	

 Σ 1110 7^h 27^m: + 32° 7'.

1888.173	230.3	. . .	230.6	. . .	1	. . .	. .	. . .	5.0 L
9.301	229.0	5.89	228.2	5.89	2	2.0	. .	2.7	11.0 L
9.126*	227.1	5.58	229.1	5.55	2	. . .	. .	. . .	2.8 G
9.142*	228.0	5.54	229.9	5.51	3	. . .	. .	. . .	3.4 G
9.310	231.5	6.01	231.5	6.01	1	. . .	. .	. . .	10.5 Lw
1889.09			229.6	5.68		2.0	. .	2.7	

 β 201 7^h 34^m: -- 20° 1'.

1888.970	330.9	2.80	330.1	2.81	3	7.8	. .	8.0	7.7 L
8.995	331.8	2.74	331.8	2.70	2	7.6	. .	8.0	7.2 G
9.126	331.5	3.05	331.8	3.02	2	8.0	. .	8.2	6.4 G
1889.02			331.1	2.84		7.8	. .	8.1	

Σ 1126 7^h 34^m: + 5° 29'.

	^o	"	^o	"				^h	
1889.011	144.0	1.44	143.2	1.45	2	6.8	. .	7.2	L
9.085	143.1	1.35	142.4	1.36	3	7.0	. .	7.6	L
9.030	143.5	1.63	143.6	1.58	2	6.5	. .	6.8	G
9.033	142.8	1.58	142.8	1.53	2	7.0	. .	7.3	G

1889.04			142.7	1.47		6.8	. .	7.2	
---------	--	--	-------	------	--	-----	-----	-----	--

 $\text{Hough } 37 \text{ } 7^{\text{h}} \text{ } 43^{\text{m}} : - - 2^{\circ} \text{ } 2'.$

1888.190	175.8	1.53	175.1	1.53	2	8.5	. .	8.8	L
9.082	175.8	. . .	175.1	. . .	2	8.5	. .	8.5	L
9.063	354.8	1.70	355.5	1.68	2	8.5	. .	8.4	G

1888.78			175.2	1.60		8.5	. .	8.6	
---------	--	--	-------	------	--	-----	-----	-----	--

 $\text{O } \Sigma 182 \text{ } 7^{\text{h}} \text{ } 47^{\text{m}} : + 3^{\circ} \text{ } 40'.$

1888.094	215.7	1.06	214.3	1.07	4	8.0	. .	8.3	L
8.121	35.0	1.20	33.5	1.21	4	8.1	. .	8.0	L
8.160	216.9	1.20	215.4	1.21	2	7.8	. .	8.0	L

1888.12			214.2	1.15		8.0	. .	8.1	
---------	--	--	-------	------	--	-----	-----	-----	--

 $\Sigma 1175 \text{ } 7^{\text{h}} \text{ } 57^{\text{m}} : + 4^{\circ} \text{ } 28'.$

1888.130	222.4	. . .	221.0	. . .	2	7.6	. . .	9.0	L
8.182	224.2	. . .	222.7	. . .	2	8.2	. .	9.4	L
8.228	222.7	1.98	221.2	1.99	3	8.0	. .	8.8	L

1888.19			221.6	1.99		7.9	. .	9.1	
---------	--	--	-------	------	--	-----	-----	-----	--

 $\Sigma 1177 \text{ } 7^{\text{h}} \text{ } 59^{\text{m}} : + 27^{\circ} \text{ } 53'.$

1888.121	350.4	3.63	348.8	3.65	2	6.8	. .	7.3	L
----------	-------	------	-------	------	---	-----	-----	-----	---

 $\beta 903 \text{ } 7^{\text{h}} \text{ } 59^{\text{m}} : - 1^{\circ} \text{ } 33'.$

1888.091	33.8	1.68	32.3	1.69	4	8.2	. .	9.8	L
8.190	33.8	. . .	32.3	. . .	2	8.2	. .	9.5	L

1888.14			32.3	1.69		8.2	. .	9.6	
---------	--	--	------	------	--	-----	-----	-----	--

 $\beta 583 \text{ } 8^{\text{h}} \text{ } 4^{\text{m}} : - 6^{\circ} \text{ } 22'.$

1888.091	71.2	1.73	69.9	1.75	4	8.8	. .	9.2	L
8.160	69.6	1.77	68.3	1.79	2	8.8	. .	9.0	L

1888.11			69.4	1.76		8.8	. .	9.1	
---------	--	--	------	------	--	-----	-----	-----	--

Σ 1196 8^h 6^m: + 17° 59'.

A: B.

	°	"	°	"				h	
1889.186	44.0	1.00	42.4	1.02	2	5.5	. .	5.6	7.9 L
9.197	40.7	1.04	40.1	1.03	3	5.0	. .	5.2	10.1 L
9.195	37.7	1.16	38.4	1.14	2	5.5	. .	5.6	9.8 G
1889.19			40.3	1.05		5.3	. .	5.5	

A: C.

1889.186	119.9	5.63	120.2	5.64	2	5.5	. .	5.8	8.3 L
9.197	120.9	5.70	119.8	5.72	3	5.0	. .	5.5	10.0 L
9.195	116.8	5.59	117.7	5.56	2	5.5	. .	6.0	9.0 G
1889.19			119.3	5.65		5.3	. .	5.8	

B: C.

1889.186	128.6	5.42	128.8	5.43	2	5.6	. .	5.8	8.4 L
9.197	130.0	5.36	129.3	5.39	3	5.2	. .	5.5	10.0 L
9.195	126.1	5.51	127.1	5.48	2	5.6	. .	6.0	9.5 G
1889.19			128.5	5.43		5.5	. .	5.8	

 β 204 8^h 8^m: + 10° 43'.

1889.112	304.2	1.00	304.2	1.01	2	7.8	. .	9.4	8.0 L
----------	-------	------	-------	------	---	-----	-----	-----	-------

 β 905 8^h 11^m: — 15° 59'.

1888.110	12.4	. . .	11.8	. . .	2	8.2	. .	10.5	8.8 L
9.033	11.0	4.07	10.3	4.06	2	8.0	. .	10.4	8.3 L
1888.57			11.0	4.06		8.1	. .	10.4	

 β 205 8^h 28^m: — 24° 14'.

1889.156	258.1	0.71	257.0	0.74	3	7.0	. .	7.2	8.6 L
----------	-------	------	-------	------	---	-----	-----	-----	-------

Cin. measures of this pair give 1878.53 100.°3 0.''65.

 β 206 8^h 31^m: — 24° 44'.

1889.093	279.9	1.72	280.1	1.74	2	7.8	. .	8.3	8.3 L
9.112	280.7	1.73	280.5	1.75	2	8.0	. .	8.4	8.8 L
9.066	278.8	1.79	280.3	1.77	3	8.2	. .	8.4	8.4 G
1889.09			280.3	1.76		8.0	. .	8.4	

β 207 8 ^h 34 ^m : — 19° 21'.									
	^o	"	^o	"				^h	
1888.212	101.3	3.94	101.7	3.95	2	7.0	. . 9.8	8.1	L
9.093	103.4	4.16	103.8	4.17	2	7.0	. . 10.5	8.0	L

1888.65			102.8	4.06		7.0	. . 10.2		
---------	--	--	-------	------	--	-----	----------	--	--

Σ 1273 8 ^h 41 ^m : + 6° 50'.									
1889.142	230.7	3.19	229.1	3.21	3	3.0	. . 7.0	8.6	L
9.151	230.9	3.22	229.4	3.24	2	3.0	. . 7.0	8.1	L
9.041	227.9	3.77	228.5	3.67	2	3.5	. . 6.8	8.6	G
9.107	227.3	2.96	227.4	2.85	2	3.0	. . 7.5	8.0	G
9.184	228.5	3.21	229.6	3.12	3	3.0	. . 7.5	8.9	G

1889.13			228.9	3.21		3.1	. . 7.2		
---------	--	--	-------	------	--	-----	---------	--	--

β 24 8 ^h 49 ^m : — 8° 20'.									
1888.190	176.1	1.20	175.5	1.19	2	7.4	. . 8.5	8.5	L
9.085	176.2	1.20	175.6	1.19	2	8.0	. . 9.0	8.6	L
9.063	169.1	1.22	170.0	1.20	3	7.0	. . 8.0	8.2	G
9.195	174.2	1.18	175.0	1.16	2	7.5	. . 8.0	8.5	G

1888.91			173.8	1.19		7.5	. . 8.4		
---------	--	--	-------	------	--	-----	---------	--	--

β 210 8 ^h 52 ^m : — 17° 0'.									
1888.110	181.9	2.88	181.2	2.87	2	6.5	. . 6.8	8.2	L
8.149	181.8	2.80	181.2	2.78	2	6.2	. . 6.6	9.1	L
8.182	181.8	2.73	181.1	2.72	2	6.0	. . 6.3	8.6	L
8.182	181.1	...	181.1	...	1	...	. . ...	8.3	G
9.247	180.6	2.80	181.8	2.78	2	7.2	. . 7.3	8.6	G
8.182	182.0	...	182.0	...	1	...	. . ...	8.4	C

1888.37			181.4	2.79		6.5	. . 6.8		
---------	--	--	-------	------	--	-----	---------	--	--

β 211 8 ^h 56 ^m : + 3° 7'.									
1888.091	262.5	1.02	261.9	1.05	4	7.0	. . 9.0	8.7	L
9.066	263.0	1.03	262.1	1.06	3	7.2	. . 9.2	9.1	L

1888.51			262.0	1.05		7.1	. . 9.1		
---------	--	--	-------	------	--	-----	---------	--	--

β 455 9 ^h 9 ^m : + 4° 38'.									
1888.244	70.0	1.88	68.9	1.90	1	8.4	. . 10.0	8.9	L
9.112	73.8	1.88	72.5	1.90	2	8.0	. . 10.5	9.1	L
9.142	69.9	1.95	68.8	1.97	2	8.3	. . 10.2	8.9	L

1888.95			70.3	1.93		8.2	. . 10.2		
---------	--	--	------	------	--	-----	----------	--	--

β 212 9^h 11^m: — 7° 54'.

	^o	"	^o	"				^h	
1888.190	226.3	1.27	224.7	1.29	3	7.8	. .	8.0	8.8 L
8.228	226.4	1.27	224.8	1.29	2	8.0	. .	8.2	8.7 L
9.142	225.1	1.53	226.6	1.45	3	7.3	. .	7.5	9.6 G
1888.56			225.4	1.35		7.7	. .	7.9	

 Σ 1343 9^h 14^m: + 5° 28'.

1888.269	272.0	9.90	271.9	9.92	2	8.8	. .	9.0	9.0 L
----------	-------	------	-------	------	---	-----	-----	-----	-------

 Σ 1348 9^h 19^m: + 6° 47'.

1888.187	145.6	1.81	144.8	1.81	3	...	. .	...	8.4 L
8.244	145.9	1.66	145.2	1.67	2	7.3	. .	7.6	9.3 L
9.041	324.0	1.58	323.7	1.59	3	7.1	. .	7.0	9.8 L
8.187	146.2	1.96	146.2	1.96	1	...	. .	...	8.9 G
9.184	145.4	1.79	145.6	1.74	3	7.4	. .	7.5	9.6 G
8.187	146.6	...	146.6	...	1	...	. .	...	8.7 C
1888.62			145.0	1.73		7.3	. .	7.4	

 Σ 1355 9^h 22^m: + 6° 46'.

1889.085	152.3	2.80	151.5	2.80	3	7.0	. .	7.0	9.2 L
----------	-------	------	-------	------	---	-----	-----	-----	-------

 Σ 1356 9^h 22^m: + 9° 33'.

1888.091	95.0	0.66	95.1	0.68	4	6.0	. .	6.3	9.2 L
8.121	95.1	0.73	95.2	0.75	4	6.2	. .	7.0	9.2 L
8.160	93.2	0.77	93.4	0.79	2	6.0	. .	7.0	9.0 L
9.038	97.3	0.67	95.8	0.69	3	...	. .	...	11.2 L
9.041	98.3	0.68	97.2	0.70	2	6.0	. .	7.0	10.4 L
9.063	98.7	0.66	97.9	0.69	3	5.7	. .	7.0	10.0 L
9.066	96.3	0.69	96.0	0.72	2	6.0	. .	7.2	9.5 L
1888.57			95.8	0.71		6.0	. .	6.9	

 β 339 9^h 26^m: — 15° 16'.

1888.228	220.8	1.30	219.3	1.31	2	9.0	. .	10.2	9.2 L
----------	-------	------	-------	------	---	-----	-----	------	-------

 Σ 1377 9^h 38^m: + 3° 8'.

1888.149	139.0	3.5	138.4	...	1	7.5	. .	10.5	9.6 L
----------	-------	-----	-------	-----	---	-----	-----	------	-------

A. C. 5 9^h 47^m: — 7° 35'.

	^o	"	^o	"					^h	
1888.121	133.1	0.4e	132.9	0.4	1	...	...	...	...	L
Very difficult.										

H. C. 125 10^h 1^m: — 1° 11'.

1888.190	172.3	2.10	171.7	2.09	2	8.6	...	8.7	9.8	L
8.212	172.8	1.94	172.2	1.93	2	8.6	...	8.9	9.5	L
8.228	171.3	2.02	170.7	2.01	2	9.2	...	9.4	9.5	L

1888.21			171.5	2.01		8.8	...	9.0		
---------	--	--	-------	------	--	-----	-----	-----	--	--

The only other measures are 1880.70 351.^o3 1.^h94 2° β.β 217 10^h 2^m: — 24° 11'.

1889.085	94.1	...	95.9	...	2	8.1	...	8.2	9.2	G
9.247	97.3	1.60	98.5	1.58	2	7.9	...	8.0	10.0	G

1889.17			97.2	1.58		8.0	...	8.1		
---------	--	--	------	------	--	-----	-----	-----	--	--

β 218 10^h 2^m: — 19° 10'.

1888.091	120.4	0.79	120.6	0.80	2	7.0	...	7.5	10.0	L
8.121	119.7	0.96	119.8	0.97	4	8.0	...	8.3	9.8	L

1888.11			120.1	0.91		7.5	...	7.9		
---------	--	--	-------	------	--	-----	-----	-----	--	--

β 790 10^h 5^m: — 12° 20'.

1888.212	71.2	...	69.9	...	2	9.6	...	10.2	9.9	L
9.186	65.4	2.27	64.4	2.30	2	9.2	...	10.3	9.4	L
9.195	68.6	2.13	67.1	2.15	2	9.0	...	11.0	11.2	L
9.236	68.7	1.93	67.2	1.95	2	9.0	...	10.3	10.5	L

1888.96			67.2	2.13		9.2	...	10.4		
---------	--	--	------	------	--	-----	-----	------	--	--

Σ 1417 10^h 9^m: + 19° 42'.

1888.280	258.9	2.51	257.4	2.52	2	8.3	...	8.3	11.7	L
9.195	260.4	2.32	258.9	2.33	3	8.4	...	8.4	11.6	L

1888.83			258.3	2.41		8.4	...	8.4		
---------	--	--	-------	------	--	-----	-----	-----	--	--

β 25 10^h 16^m: — 9° 13'.

1888.160	177.4	1.95	176.7	1.94	2	8.0	...	8.8	9.6	L
8.212	178.7	1.78	178.1	1.77	2	8.0	...	8.8	10.2	L
8.294	179.4	...	178.7	...	2	...	...	...	9.9	L

1888.22			177.8	1.86		8.0	...	8.8		
---------	--	--	-------	------	--	-----	-----	-----	--	--

		O Σ 218 10 ^h		22 ^m : + 4° 7'.					
	^o	"	^o	"				^h	
1888.280	69.4	...	68.2	...	1	...	...	10.3	L
9.066	72.8	1.01	71.8	1.04	2	7.4	.. 9.4	10.0	L
9.142*	70.8	...	69.3	...	2	7.0	.. 9.0	10.8	L
9.186	68.8	1.06	67.9	1.09	2	7.0	.. 8.8	9.8	L
1889.01			69.5	1.06		7.1	.. 9.1		

		H 352 10 ^h		25 ^m : — 30° 3'.					
1888.121	225.6	11.05	224.1	11.06	2	5.0	.. 8.0	10.9	L
9.186	225.5	11.01	223.9	11.03	2	6.0	.. 9.0	10.2	L
1888.66			224.0	11.04		5.5	.. 8.5		
Probably fixed.									

		Σ 1450 10 ^h		29 ^m : + 9° 12'.					
1889.156	157.8	2.48	157.0	2.48	3	6.0	.. 9.0	10.6	L
9.085	156.9	2.55	157.1	2.52	3	6.2	.. 8.5	10.1	G
9.195	159.5	2.75	159.7	2.71	2	6.5	.. 8.5	10.2	G
1889.14			157.7	2.55		6.2	.. 8.7		

		Σ 1457 10 ^h		33 ^m : + 6° 18'.					
1888.190	317.3	1.29	316.6	1.30	4	8.0	.. 8.3	10.2	L
8.280	318.7	1.11	318.1	1.12	3	8.0	.. 8.2	10.5	L
1888.23			317.2	1.22		8.0	.. 8.2		

		Σ 1476 10 ^h		44 ^m : — 3° 25'.					
1888.149	359.8	2.19	359.0	2.18	2	7.0	.. 7.7	9.9	L
8.228	359.6	2.20	359.0	2.19	3	7.0	.. 8.0	10.5	L
9.085	358.1	2.49	359.1	2.47	3	7.2	.. 7.9	10.5	G
9.241	359.7	2.31	0.2	2.28	3	6.5	.. 6.8	11.3	G
1888.72			359.3	2.29		6.9	.. 7.6		

		β 111 10 ^h		46 ^m : — 8° 31'.					
1888.149	5.7	3.87	5.0	3.86	2	9.4	.. 9.6	10.4	L
8.244	3.8	3.71	3.0	3.70	1	...	.. ...	10.0	L
8.321	6.8	3.35	6.2	3.34	3	9.3	.. 9.4	11.3	L
8.187	6.2	3.48	6.2	3.48	1	...	.. ...	10.7	G
8.187	5.6	3.17	5.6	3.17	1	...	.. ...	...	C
1888.24			5.4	3.51		9.4	.. 9.5		

H i 77 10 ^h 57 ^m : —15° 11'.									
	^c	"	^o	"				^h	
1888.160	16.8	2.86	15.7	2.85	2	8.2	. .	8.4	10.5 L
8.212	17.4	3.02	16.6	3.01	2	8.0	. .	8.0	10.9 L
9.247	14.8	2.91	17.2	2.86	2	7.9	. .	7.9	10.6 G
1888.54			16.5	2.91		8.0	. .	8.1	

H. A. H. 15 10 ^h 58 ^m : — 26° 55'.									
1889.236	332.7	2.14	332.0	2.15	2	8.3	. .	9.5	11.4 L

Σ 1504 10 ^h 58 ^m : + 4° 14'.									
1888.121	102.5	1.11	102.8	1.12	4	7.0	. .	7.4	10.5 L
8.190	103.2	1.24	103.5	1.25	4	7.2	. .	7.3	10.8 L
8.228	103.2	1.20	103.4	1.22	2	7.0	. .	7.0	10.9 L
9.197	104.3	1.07	105.8	1.05	3	7.7	. .	7.8	11.1 G
1888.41			103.8	1.16		7.2	. .	7.4	

β 220 11 ^h 7 ^m : — 17° 54'.									
1889.041	129.0	0.68	128.6	0.69	2	6.2	. .	7.2	11.2 L
9.063	152.5	. . .	151.7	. . .	1	6.0	. .	6.6	10.5 L
9.085	138.3	0.7e	138.0	0.7	2	6.2	. .	6.7	11.6 L
9.186	134.0	0.71	133.3	0.72	2	6.0	. .	6.8	10.6 L
1889.10			136.1	0.71		6.1	. .	6.8	
Very difficult.									

β 916 11 ^h 9 ^m : — 14° 50'.									
1888.121	354.8	0.65	354.0	0.64	2	7.0	. .	8.0	10.2 L
8.190	359.9	0.6e	359.2	0.6	2	7.0	. .	8.5	10.6 L
9.041	0.6	0.65e	0.0	0.65	2	7.0	. .	8.0	11.5 L
1888.45			357.7	0.64		7.0	. .	8.2	

Σ 1527 11 ^h 13 ^m : + 14° 53'.									
1889.247	14.6	3.51	14.0	3.50	3	7.0	. .	7.6	11.8 L
9.271	15.2	3.34	14.5	3.33	3	7.0	. .	7.7	11.5 L
9.233	13.3	3.49	13.9	3.47	2	7.5	. .	8.0	11.9 G
9.236	14.1	3.46	15.0	3.44	4	7.5	. .	7.8	11.7 G
9.310	13.9	3.86	13.9	3.86	1	...	. .	...	12.0 Lw
9.312	15.1	3.97	15.1	3.97	1	...	. .	...	11.8 Lw
1889.26			14.5	3.50		7.2	. .	7.8	

Σ 1536 11^h 18^m: + 11° 9'.

	^o	"	^o	"					^h	
1889.156	62.1	2.55	60.8	2.57	3	4.6	. .	7.8	11.1	L
9.186	64.9	2.56	63.6	2.58	3	4.0	. .	7.0	11.0	L
9.085	61.2	2.63	61.1	2.53	3	4.2	. .	7.7	10.8	G
9.197	62.3	2.66	62.3	2.55	4	5.0	. .	7.5	11.5	G
1889.16			62.0	2.56		4.4	. .	7.5		

 β 26 11^h 18^m: — 9° 49'.

1888.280	70.3	2.81	69.0	2.83	2	7.8	. .	10.2	11.3	L
9.066	69.3	2.87	68.4	2.90	2	8.0	. .	10.5	10.6	L
1888.67			68.7	2.86		7.9	. .	10.4		

 β 601 11^h 24^m: — 16° 44'.

B: C.

1888.121	225.6	0.7e	224.1	0.7	2	7.4	. .	8.4	11.3	L
9.186	223.9	0.8e	222.4	0.8	2	8.0	. .	9.0	11.3	L
1888.65			223.2	0.75		7.7	. .	8.7		

 β 603 11^h 43^m: + 14° 54'.

1889.271	327.5	1.5	326.7	. . .	2	7.0	. .	10.0	11.6	L
----------	-------	-----	-------	-------	---	-----	-----	------	------	---

h 4495 12^h 0^m: — 32° 20'.

1889.195	314.1	6.58	313.8	6.59	2	7.0	. .	8.8	12.1	L
9.241	314.9	6.60	314.6	6.61	2	6.7	. .	9.0	12.2	L
1889.22			314.2	6.60		6.8	. .	8.9		

 β 605 12^h 14^m: — 21° 33'.

1889.041	137.5	0.8e	137.0	0.8	2	6.0	. .	8.5	12.1	L
----------	-------	------	-------	-----	---	-----	-----	-----	------	---

Holden 13 12^h 21^m: — 1° 16'.

1888.308	157.4	. . .	156.6	. . .	2	. . .	. . .	. . .	12.0	L
8.321	153.1	1.28	152.4	1.28	2	8.7	. .	9.2	11.7	L
1888.31			154.5	1.28		8.7	. .	9.2		

β 28 12 ^h 24 ^m : — 12° 46'.									
	^o	"	^o	"				^h	
1889.241	3.5	2.0	2.9	...	2	6.0	..	11.0	L
9.247	2.5	...	1.9	...	2	6.0	..	11.0	L
1889.24			2.4	...		6.0	..	11.0	

Σ 1647 12 ^h 25 ^m : + 10° 20'.									
1888.269	222.9	1.49	221.3	1.50	2	7.8	..	8.2	L
8.321	222.6	1.37	221.0	1.38	4	8.0	..	8.2	L
9.197	216.9	1.22	218.7	1.15	3	8.2	..	8.4	G
1888.60			220.3	1.34		8.0	..	8.3	

F. P. L. 12 ^h 28 ^m : — 17° 35'.									
1888.184	35.6	...	34.3	...	1	7.2	..	9.6	L
8.190	32.6	1.41	31.8	1.40	2	7.0	..	9.8	L
1888.19			32.6	1.40		7.1	..	9.7	

The only other observation is 1887 \pm 34°. 1//47 L.

Σ 1668 12 ^h 35 ^m : + 9° 28'.									
1889.271	195.4	1.46	194.4	1.45	2	8.0	..	8.3	L

Σ 1669 12 ^h 36 ^m : — 12° 23'.									
1888.286	303.4	5.63	302.8	5.64	2	6.8	..	7.0	L
8.318	304.4	5.68	304.3	5.69	2	6.0	..	6.0	L
8.439*	304.0	5.73	304.2	5.74	4	6.0	..	6.2	L
1888.37			303.9	5.70		6.3	..	6.4	

Σ 1670 12 ^h 36 ^m : — 0° 50'.									
1888.294	154.0	5.55	153.2	5.55	2	...	..	...	L
8.313	156.1	5.48	155.3	5.48	2	3.0	..	3.0	L
8.346	156.5	5.42	155.7	5.43	2	3.5	..	3.5	L
8.428	155.3	5.40	154.5	5.41	3	3.0	..	3.0	L
9.085	153.1	5.58	152.3	5.59	3	3.0	..	3.1	L
9.195	153.2	5.62	152.4	5.63	3	3.0	..	3.8	L
9.197	334.0	5.57	334.1	5.53	4	3.8	..	3.5	G
9.236	153.0	5.48	153.0	5.44	4	3.5	..	3.7	G
9.271	153.6	5.50	153.5	5.45	2	3.2	..	3.4	G
9.361	155.1	...	155.1	...	1	...	..	...	Lw
1888.91			153.8	5.50		3.2	..	3.4	

O. S. 73 12 ^h 52 ^m : — 12° 32'.									
	^o	"	^o	"				^h	
1888.184	68.2	1.82	66.9	1.84	3	8.2	. .	8.2	L
8.269	68.2	1.99	67.3	2.02	2	8.3	. .	8.3	L
<hr/>									
1888.22			67.1	1.91		8.2	. .	8.2	
<hr/>									
β 928 12 ^h 58 ^m : — 6° 0'.									
1888.269	312.0	1.96	311.5	1.97	2	8.0	. .	9.3	L
8.280	313.0	1.96	312.3	1.97	2	...	. .	...	L
9.038	312.9	2.00	312.6	2.01	2	...	. .	...	L
9.197	313.0	...	313.5	...	2	8.5	. .	10.0	G
<hr/>									
1888.70			312.5	1.98		82.	. .	9.6	
<hr/>									
β 929 12 ^h 58 ^m : — 3° 4'.									
1888.318	223.1	0.61	221.6	0.63	3	6.0	. .	6.5	L
8.321	220.1	0.62	218.6	0.64	3	6.0	. .	6.5	L
<hr/>									
1888.32			220.1	0.64		6.0	. .	6.5	
<hr/>									
Σ 1728 13 ^h 5 ^m : + 18° 7'.									
1889.085	10.5	0.56	9.6	0.55	2	5.6	. .	5.6	L
<hr/>									
β 342 13 ^h 9 ^m : — 18° 20'.									
1888.294	35.0	4.02	33.5	4.03	1	8.4	. .	8.7	L
8.346	36.4	3.57	34.9	3.58	1	8.4	. .	8.7	L
<hr/>									
1888.32			34.2	3.80		8.4	. .	8.7	
<hr/>									
Σ 1734 13 ^h 15 ^m : + 3° 30'.									
1888.313	190.6	...	189.9	...	2	...	. .	...	L
8.428	191.7	1.17	190.9	1.16	4	6.6	. .	7.2	L
9.038	192.8	1.18	191.6	1.18	2	7.0	. .	8.0	L
9.197	189.0	...	190.7	...	2	7.2	. .	7.8	G
9.236	188.5	1.21	190.3	1.18	2	7.0	. .	7.3	G
<hr/>									
1888.77			190.7	1.17		7.0	. .	7.6	
<hr/>									
Σ 1742 13 ^h 19 ^m : + 1° 58'.									
1889.085	351.0	1.27	350.3	1.27	2	7.7	. .	7.8	L
9.195	349.9	1.17	349.3	1.16	2	7.3	. .	7.6	L
9.271	349.8	...	351.4	...	2	...	. .	...	G
<hr/>									
1889.18			350.3	1.22		7.5	. .	7.7	

Σ 1757 13 ^h 29 ^m : + 0° 16'.									
	^o	"	^o	"				^h	
1888.244	72.1	2.61	71.1	2.64	3	8.2	. .	8.9	13.3 L
8.321	73.5	2.43	72.2	2.45	3	8.0	. .	8.7	13.6 L
9.195	73.8	2.27	72.8	2.30	3	7.4	. .	7.8	13.2 L
<hr/>									
1888.59			72.0	2.46		7.9	. .	8.5	

β 114 13 ^h 28 ^m : — 8° 3'.									
1888.184	138.2	1.36	137.6	1.37	2	8.0	. .	8.2	13.3 L
8.318	137.3	1.52	136.7	1.53	3	8.0	. .	8.3	13.3 L
9.041	138.4	1.36	137.6	1.37	2	8.3	. .	8.4	12.6 L
<hr/>									
1888.49			137.2	1.44		8.1	. .	8.3	

β 933 13 ^h 30 ^m : + 33° 42'.									
1888.286	28.5	2.07	28.3	2.09	2	8.2	. .	9.0	11.3 L
9.066	29.8	. . .	29.6	. . .	2	8.3	. .	9.3	11.3 L
<hr/>									
1888.68			29.0	2.09		8.2	. .	9.2	

Σ 1777 13 ^h 38 ^m : + 4° 6'.									
1888.346	236.1	3.53	234.7	3.55	2	5.7	. .	8.1	13.2 L
8.376	235.0	3.35	233.5	3.37	2	6.0	. .	8.2	13.6 L
8.436	233.6	3.50	232.0	3.52	2	5.7	. .	8.2	13.9 L
9.236	230.5	3.27	231.1	3.17	1	6.7	. .	8.4	13.7 G
9.271	233.6	3.38	233.8	3.27	2	6.0	. .	8.5	13.5 G
<hr/>									
1888.68			233.2	3.40		6.0	. .	8.3	

Σ 1788 13 ^h 49 ^m : — 7° 31'.									
1888.346	74.8	2.61	73.9	2.64	2	6.8	. .	7.5	13.5 L
8.376	76.0	2.89	74.9	2.91	2	6.0	. .	7.0	13.9 L
9.271	75.4	2.74	75.2	2.64	2	7.0	. .	8.0	14.0 G
<hr/>									
1888.66			74.7	2.73		6.6	. .	7.5	

β 939 14 ^h 8 ^m : — 8° 1'.									
1888.190	149.2	0.71	148.4	0.72	2	8.0	. .	8.5	13.9 L
8.439	147.6	0.65e	146.9	0.65	3	8.0	. .	8.4	14.1 L
<hr/>									
1888.34			147.5	0.68		8.0	. .	8.4	

β 116 14 ^h 14 ^m : — 13° 12'.									
	^o	"	^o	"				^h	
1888.321	97.9	3.03	98.0	3.05	3	8.2	. .	8.4	14.0 L
8.431	277.0	2.93	277.3	2.95	2	8.3	. .	8.0	13.8 L

1888.36			277.7	3.01		8.2	. .	8.2	
---------	--	--	-------	------	--	-----	-----	-----	--

Σ 1837 14 ^h 19 ^m : — 11° 8'.									
1888.244	304.0	1.67	304.0	1.68	2	7.0	. .	8.5	14.1 L
8.318	306.6	1.69	306.5	1.70	2	7.0	. .	8.4	13.9 L
8.346	306.8	1.86	306.7	1.87	2	6.8	. .	7.8	14.0 L
9.236	304.2	1.35	305.4	1.31	2	7.3	. .	7.8	14.2 G

1888.54			305.6	1.64		7.0	. .	8.1	
---------	--	--	-------	------	--	-----	-----	-----	--

β 117 14 ^h 25 ^m : — 15° 7'.									
1888.346	90.2	2.30	89.9	2.33	2	8.4	. .	8.8	14.3 L
8.431	91.2	2.22	91.0	2.25	2	8.0	. .	9.0	14.1 L

1888.39			90.4	2.29		8.2	. .	8.9	
---------	--	--	------	------	--	-----	-----	-----	--

β 941 14 ^h 30 ^m : + 0° 44'.									
1888.190	39.9	0.69	38.4	0.70	3	8.4	. .	8.4	14.3 L
8.318	40.7	0.88	39.1	0.89	3	8.3	. .	8.5	14.2 L
8.461	46.0	. . .	44.4	. . .	2	. . .	. .	. . .	14.1 L

1888.31			40.2	0.80		8.4	. .	8.5	
---------	--	--	------	------	--	-----	-----	-----	--

β 807 14 ^h 37 ^m : — 6° 20'.									
1888.461	242.4	1.13	241.0	1.15	2	8.0	. .	9.0	14.4 L

Σ 1876 14 ^h 41 ^m : — 6° 55'.									
1888.184	254.1	1.35	252.8	1.37	2	8.0	. .	8.2	14.9 L
8.439	71.2	1.20	70.2	1.23	2	8.0	. .	7.8	14.5 L

1888.31			251.5	1.30		8.0	. .	8.0	
---------	--	--	-------	------	--	-----	-----	-----	--

β 106 14 ^h 43 ^m : — 13° 41'.									
1888.184	339.2	1.73	338.5	1.73	2	6.0	. .	7.0	14.1 L
8.431	340.6	1.53	339.8	1.53	2	6.0	. .	7.5	14.4 L
8.442	340.0	1.62	339.2	1.63	2	6.0	. .	7.0	14.6 L

1888.35			339.2	1.63		6.0	. .	7.2	
---------	--	--	-------	------	--	-----	-----	-----	--

Probably a slight increase in angle and distance.

Holden 21 14^h 49^m: — 14° 17′.

1888.431	^o 203.0	^h 3.87	^o 202.0	^h 3.86	2	8.4 . . 8.8	^h 14.8	L
----------	-----------------------	----------------------	-----------------------	----------------------	---	-------------	----------------------	---

 β 239 14^h 52^m: — 27° 12′.

1888.428	128.3	0.95	128.3	0.96	2	6.0 . . 6.0	15.2	L
----------	-------	------	-------	------	---	-------------	------	---

 β 119 15^h 0^m: — 6° 35′.

1888.439	305.2	1.65	305.1	1.66	2	7.8 . . 8.4	14.8	L
8.461	307.3	1.56	307.2	1.57	3	8.0 . . 8.5	14.8	L

1888.45			306.4	1.61		7.9 . . 8.4		
---------	--	--	-------	------	--	-------------	--	--

 Σ 1910 15^h: 2^m: + 9° 39′.

1888.266	211.2	3.82	210.2	3.82	1	... . . ...	15.3	L
8.505	211.6	4.31	210.6	4.30	4	6.4 . . 6.6	15.4	L

1888.42			210.5	4.20		6.4 . . 6.6		
---------	--	--	-------	------	--	-------------	--	--

 Σ 1925 15^h 11^m: — 7° 51′.

1888.485	11.9	4.65	11.2	4.64	3	8.0 . . 8.6	15.2	L
----------	------	------	------	------	---	-------------	------	---

 β 32 15^h 15^m: + 1° 7′.

1888.439	14.6	2.79	13.8	2.78	2	4.5 . . 9.5	15.2	L
----------	------	------	------	------	---	-------------	------	---

 β 121 15^h 33^m: — 27° 17′.

1888.505	274.2	1.5	274.0	...	3	15.6	L
----------	-------	-----	-------	-----	---	-------------	------	---

 β 122 15^h 33^m: — 19° 25′.

1888.184	208.6	1.96	207.3	1.96	2	6.7 . . 7.0	15.3	L
8.442	209.1	1.95	207.7	1.96	2	7.7 . . 7.8	15.1	L
8.485	207.1	1.95	206.0	1.95	3	8.2 . . 8.2	15.5	L

1888.39			206.9	1.96		7.5 . . 7.7		
---------	--	--	-------	------	--	-------------	--	--

H. A. H. 36 15^h 35^m: — 14° 28′.

1888.431	88.2	5.94	88.0	5.96	1	... . . ...	15.2	L
8.488	90.9	5.25	90.3	5.28	2	8.0 . . 8.5	15.7	L

1888.46			89.5	5.51		8.0 . . 8.5		
---------	--	--	------	------	--	-------------	--	--

β 619 15^h 38^m: + 14° 1'.

	^o	"	^o	"					^h	
1888.321	359.9	0.6e	358.3	0.6	2	...	...	...	13.3	L
8.439	3.8	0.63	2.2	0.65	3	6.0	...	7.0	13.7	L
1888.39			0.6	0.63		6.0	...	7.0		

 β 36 15^h 47^m: — 25° 0'.

1888.576	277.8	2.60	277.1	2.63	3	5.8	...	7.6	16.9	L
----------	-------	------	-------	------	---	-----	-----	-----	------	---

 Σ 1985 15^h 50^m: — 1° 50'.

1888.439	335.2	6.84	335.2	...	1	...	...	...	...	Q
8.516	335.1	5.77	334.3	5.78	4	6.3	...	7.4	15.8	L
1888.50			334.5	5.78		6.3	...	7.4		

 β 623 15^h 55^m: — 6° 40'.

1888.272	239.2	0.99	237.8	1.01	2	8.0	...	9.0	15.6	L
----------	-------	------	-------	------	---	-----	-----	-----	------	---

 Σ 1998 15^h 58^m: — 11° 4'.

A: B.

1888.461	21.6	1.32	20.5	1.32	2	5.0	...	5.2	15.5	L
8.538	201.1	1.16	200.3	1.15	2	5.2	...	5.0	16.3	L
1888.50			20.4	1.24		5.1	...	5.1		

B: C.

1888.461	69.1	7.27	67.8	7.29	3	5.2	...	7.2	15.8	L
8.538	69.5	6.98	68.1	7.00	3	5.0	...	7.8	16.1	L
1888.50			68.0	7.14		5.1	...	7.5		

A: C.

1888.538	64.0	7.98	62.5	8.00	2	5.2	...	7.8	16.2	L
----------	------	------	------	------	---	-----	-----	-----	------	---

 β 948 16^h 0^m: — 6° 0'.

1888.428	148.5	1.54	147.7	1.54	3	6.8	...	9.7	15.5	L
8.485	147.8	1.55	147.0	1.56	3	7.0	...	9.2	15.9	L
1888.46			147.4	1.55		6.9	...	9.4		

β 39 16 ^h 1 ^m : — 12° 28'.									
	^o	"	^o	"				^h	
1888.442	260.3	3.30	259.4	3.33	2	5.5	. . 10.0	16.1	L

β 120 16^h 6^m: — 19° 11'.

A : B.

1888.272	3.4	0.81	2.8	0.80	2	...	. . .	16.6	L
8.428	3.9	0.82	3.3	0.81	3	4.0	. . 6.0	16.1	L
8.435	6.5	0.81	5.9	0.80	3	4.0	. . 5.0	16.2	L

1888.41			4.1	0.80		4.0	. . 5.5		
---------	--	--	-----	------	--	-----	---------	--	--

Motion doubtful.

O. M. M. = C : D.

1888.272	48.5	2.46	46.9	2.48	2	7.5	. . 8.3	16.3	L
8.428	50.3	2.14	48.7	2.16	4	7.0	. . 7.6	15.9	L
8.485	50.2	2.12	48.6	2.14	4	7.7	. . 8.3	16.4	L

1888.42			48.3	2.22		7.4	. . 8.1		
---------	--	--	------	------	--	-----	---------	--	--

β 950 16^h 19^m: — 9° 37'.

1888.461	351.5	1.2	350.9	...	1	8.0	. . 10.0	16.1	L
----------	-------	-----	-------	-----	---	-----	----------	------	---

Σ 2041 16^h 20^m: + 1° 30'.

1888.505	1.3	2.46	0.7	2.45	2	7.8	. . 10.0	16.1	L
----------	-----	------	-----	------	---	-----	----------	------	---

O. M. M. 16^h 23^m: — 26° 12'.

1888.543	275.1	3.35	274.9	3.38	2	1.0	. . 6.5	16.5	L
8.548	275.7	3.46	275.5	3.49	2	1.0	. . 6.5	16.5	L
8.568	275.7	3.09	275.5	3.12	2	1.0	. . 6.5	16.5	L

1888.55			275.3	3.33		1.0	. . 6.5		
---------	--	--	-------	------	--	-----	---------	--	--

Σ 2055 16^h 25^m: + 2° 14'.

1888.184	45.8	1.58	44.3	1.59	2	3.5	. . 6.0	16.7	L
8.318	42.0	1.64	40.5	1.66	3	3.5	. . 5.5	15.6	L
8.507	...	1.43	...	1.45	2	4.5	. . 6.0	16.2	L
8.535	45.7	1.42	44.1	1.44	2	5.0	. . 6.0	16.3	L
8.318	45.6	...	45.6	...	1	...	. . .	...	G

1888.37			42.6	1.55		4.1	. . 5.9		
---------	--	--	------	------	--	-----	---------	--	--

Holden 26 16^h 32^m: — 5° 7'.

1888.516	^o 183.2	^o 6.80	^o 182.6	^o 6.79	3	9.0	. .	9.2	^h 16.6	L
----------	-----------------------	----------------------	-----------------------	----------------------	---	-----	-----	-----	----------------------	---

O Σ 315 16^h 46^m: + 1° 24'.

1888.485	161.7	1.05	160.9	1.05	3	6.0	. .	8.2	16.8	L
8.505	164.1	0.85	163.4	0.85	2	6.0	. .	7.7	16.4	L
8.535	163.2	1.13	162.4	1.13	2	6.3	. .	8.0	16.6	L

1888.50			162.0	1.02		6.1	. .	8.0		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 β 241 16^h 49^m: — 21° 23'.

1888.543	167.2	0.6e	166.4	0.6	2	7.5	. .	7.5	16.9	L
8.568	162.7	0.6e	161.9	0.6	2	7.0	. .	7.0	16.9	L

1888.56			164.2	0.6		7.2	. .	7.2		
---------	--	--	-------	-----	--	-----	-----	-----	--	--

Sh 240 16^h 50^m: — 19° 22'.

1888.516	232.9	4.78	231.4	4.80	3	6.0	. .	7.3	16.3	L
----------	-------	------	-------	------	---	-----	-----	-----	------	---

Holden 27 16^h 53^m: — 13° 2'.

1888.461	135.8	5.06	135.2	5.07	2	8.2	. .	9.5	16.5	L
8.548	132.6	. . .	132.3	. . .	2	8.5	. .	9.5	17.0	L

1888.50			133.8	5.07		8.4	. .	9.5		
---------	--	--	-------	------	--	-----	-----	-----	--	--

 Σ 3107 16^h 53^m: + 4° 8'.

1888.488	94.8	1.11	94.6	1.14	2	. . .	. .	. . .	16.9	L
8.505	97.7	1.48	97.7	1.50	2	8.2	. .	8.6	16.6	L
8.535	96.5	1.23	96.4	1.25	3	8.2	. .	8.6	16.8	L

1888.51			96.3	1.29		8.2	. .	8.6		
---------	--	--	------	------	--	-----	-----	-----	--	--

 β 823 17^h 1^m: + 0° 48'.

1888.516	358.8	1.0e	358.2	. . .	2	8.0	. .	9.3	16.8	L
----------	-------	------	-------	-------	---	-----	-----	-----	------	---

O Σ 325 17^h 8^m: + 7° 53'.

1888.568	206.6	1.35	205.5	1.34	2	7.5	. .	9.0	17.2	L
----------	-------	------	-------	------	---	-----	-----	-----	------	---

h 6946 17^h 8^m: — 26° 26'.

	^o	"	^o	"				^h	
1888.184	197.2	4.42	196.3	4.41	2	4.0	. .	5.2	17.0 L
8.461	198.0	4.43	197.2	4.42	2	4.7	. .	5.0	17.2 L
8.516	197.3	4.14	196.4	4.13	2	4.0	. .	5.7	17.0 L

1888.39			196.6	4.32		4.2	. .	5.3	
---------	--	--	-------	------	--	-----	-----	-----	--

 β 957 17^h 9^m: — 10° 11'.

1888.543	20.4	0.5e	19.5	0.5	2	8.0	. .	8.0	17.1 L
----------	------	------	------	-----	---	-----	-----	-----	--------

 β 958 17^h 10^m: — 19° 13'.

1888.453	217.6	1.36	216.2	1.37	2	8.3	. .	9.2	17.2 L
----------	-------	------	-------	------	---	-----	-----	-----	--------

H 533 17^h 11^m: — 26° 30'.

1888.461	335.4	5.68	334.6	5.69	2	6.0	. .	8.0	17.0 L
8.516	336.1	5.86	335.3	5.87	2	...	. .	...	17.3 L

1888.49			335.0	5.78		6.0	. .	8.0	
---------	--	--	-------	------	--	-----	-----	-----	--

 β 126 17^h 13^m: — 17° 38'.

1888.535	264.9	1.84	264.0	1.87	2	6.0	. .	8.0	17.4 L
8.538	263.5	1.88	262.9	1.91	2	6.3	. .	8.6	17.0 L

1888.54			263.4	1.89		6.2	. .	8.3	
---------	--	--	-------	------	--	-----	-----	-----	--

 β 242 17^h 18^m: — 11° 35'.

A: B.

1888.505	75.1	0.97	74.0	0.99	2	8.0	. .	9.3	17.4 L
----------	------	------	------	------	---	-----	-----	-----	--------

A: C.

1888.505	66.1	9.64	64.6	9.66	2	8.0	. .	11.2	17.6 L
----------	------	------	------	------	---	-----	-----	------	--------

 Σ 2171 17^h 23^m: — 9° 54'.

1888.387	67.9	...	66.6	...	2	...	. .	...	17.5 L
8.488	69.8	1.50	68.5	1.52	2	8.0	. .	8.0	17.3 L
8.505	70.5	1.40	69.4	1.43	2	8.0	. .	8.3	17.0 L

1888.46			68.2	1.48		8.0	. .	8.2	
---------	--	--	------	------	--	-----	-----	-----	--

Σ 2173 17^h 25^m: — 0° 57'.

	^o	"	^o	"				^h	
1888.453	168.6	0.71	167.9	0.71	3	6.0	. .	6.0	L
8.485	167.9	0.69	167.2	0.68	4	6.0	. .	6.0	L
8.535	169.5	0.64	168.7	0.64	2	6.0	. .	6.1	L
1888.49			167.8	0.68		6.0	. .	6.0	

 Holden 30 17^h 31^m: — 23° 19'.

1888.538	104.3	3.59	104.6	3.60	2	8.7	. .	10.5	17.3	L
----------	-------	------	-------	------	---	-----	-----	------	------	---

 The only other observations are 1881.43 111.°7 3.728 3 β .

 β 631 17^h 34^m: — 0° 35'.

1888.485	60.7	0.42	59.2	0.44	4	...	. .	...	17.5	L
8.507	63.3	...	61.8	...	1	...	. .	...	17.7	L
8.543	52.5	0.4e	51.0	0.4	2	7.0	. .	7.0	17.5	L
1888.50			57.2	0.43		7.0	. .	7.0		

 $O \Sigma$ 338 17^h 47^m: + 15° 21'.

1888.485	202.8	0.59	201.8	0.58	4	6.2	. .	6.6	17.8	L
8.507	199.7	0.80	198.8	0.79	3	6.5	. .	7.5	17.9	L
8.510	199.5	0.87	198.6	0.86	3	6.0	. .	7.0	17.9	L
1888.50			199.9	0.73		6.2	. .	7.0		

 Σ 2244 17^h 51^m: + 0° 6'.

1888.568	93.1	1.00	93.2	1.02	2	6.0	. .	6.0	17.6	L
8.590	95.6	1.00	95.9	1.01	4	7.0	. .	7.0	17.1	L
1888.58			95.0	1.01		6.5	. .	6.5		

 Σ 2262 17^h 57^m: — 8° 10'.

1888.387	255.3	1.92	254.2	1.95	2	5.2	. .	6.3	17.9	L
8.488	255.8	2.02	254.9	2.05	2	5.0	. .	6.0	17.5	L
8.650	256.1	1.79	255.0	1.81	3	6.0	. .	7.0	18.1	L
1888.53			254.7	1.92		5.4	. .	6.4		

 Σ 2272 18^h 0^m: + 2° 32'.

1888.650	353.0	2.15	352.4	2.14	4	4.5	. .	6.5	17.7	L
----------	-------	------	-------	------	---	-----	-----	-----	------	---

β 245 18^h 3^m: — 30° 45'.

1888.535	^o 2.5	" 4.12	^o 1.9	" 4.11	2	6.0	.	.	8.5	^h 18.0	L
----------	---------------------	-----------	---------------------	-----------	---	-----	---	---	-----	----------------------	---

 β 132 18^h 5^m: — 19° 52'.

1888.485	235.5	0.97	234.0	0.99	4	7.4	.	.	7.6	18.1	L
8.507	233.2	1.02	231.6	1.04	2	8.0	.	.	8.6	18.2	L
1888.49			233.2	1.01		7.7	.	.	8.1		

 β 131 18^h 7^m: — 15° 38'.

1888.453	278.0	2.61	278.0	2.63	2	7.8	.	.	9.8	18.0	L
----------	-------	------	-------	------	---	-----	---	---	-----	------	---

 $\text{Schj } 24 (22)$ 18^h 14^m: — 5° 1'.

1888.387	199.3	2.38	198.4	2.37	2	7.0	.	.	9.0	18.3	L
8.488	196.2	2.31	195.3	2.30	3	7.5	.	.	9.0	18.0	L
8.568	196.2	2.36	195.3	2.35	2	7.5	.	.	9.0	18.0	L
1888.48			196.2	2.33		7.3	.	.	9.0		

 Σ 2303 18^h 14^m: — 8° 2'.

1888.538	228.1	2.58	226.6	2.60	2	7.0	.	.	9.8	17.7	L
----------	-------	------	-------	------	---	-----	---	---	-----	------	---

 Σ 2306 18^h 16^m: — 15° 9'.

 $A: \frac{1}{2} (B + C).$

1888.505	220.9	11.84	219.4	11.85	4	6.0	18.2	L
----------	-------	-------	-------	-------	---	-----	---	---	-----	------	---

 $O. M. M. = B: C.$

1888.505	68.0	1.03	66.9	1.05	2	7.8	.	.	7.8	18.0	L
----------	------	------	------	------	---	-----	---	---	-----	------	---

 β 133 18^h 21^m: — 26° 42'.

1888.507	265.0	1.73	264.3	1.76	3	6.0	.	.	6.3	18.5	L
8.535	265.9	1.82	265.2	1.85	2	5.7	.	.	6.0	18.3	L
1888.52			264.7	1.80		5.8	.	.	6.2		

 β 247 18^h 26^m: — 9° 27'.

1888.535	168.2	8.12	167.5	8.12	2	6.0	.	.	10.5	18.6	L
8.568	168.8	7.90	168.1	7.90	3	7.0	.	.	11.0	18.4	L
1888.56			167.9	7.99		6.5	.	.	10.8		

β 419 18 ^h 26 ^m : — 7° 55'.								
	^o "		^o "	^o "				^h 18.3
1888.488	57.5	1.10	56.0	1.12	2	...	...	L
8.543	58.6	1.50	57.1	1.52	2	8.0	.. 10.0	L

1888.52			56.6	1.32		8.0	.. 10.0	
---------	--	--	------	------	--	-----	---------	--

No other measures?

β 967 18 ^h 35 ^m : — 14° 37'.								
1888.453	197.8	2.4	196.9	...	1	8.0	.. 11.2	L

Σ 2375 18 ^h 40 ^m : + 5° 22'.								
1888.488	113.0	2.34	113.3	2.35	3	7.0	.. 7.5	L
8.538	114.3	2.38	114.4	2.39	3	6.5	.. 7.0	L
8.650	112.3	2.17	112.6	2.18	2	7.0	.. 7.7	L

1888.55			113.5	2.32		6.8	.. 7.4	
---------	--	--	-------	------	--	-----	--------	--

β 265 18 ^h 45 ^m : + 11° 23'.								
1888.576	238.5	...	237.1	...	1	7.0	.. 9.5	L
8.590	233.4	1.31	231.9	1.33	3	8.0	.. 10.0	L

1888.58			233.2	1.33		7.5	.. 9.8	
---------	--	--	-------	------	--	-----	--------	--

H. C. 150 18 ^h 55 ^m : — 30° 3'.								
1888.707	261.2	0.65	260.2	0.68	2	...	...	L

Holden 33 18 ^h 56 ^m : — 28° 49'.								
1888.507	64.8	2.69	63.4	2.71	2	8.6	.. 8.9	L

h 5084 18 ^h 59 ^m : — 37° 14'.								
1888.707	188.7	1.2	188.0	...	1	...	...	L

S 710 19 ^h 0 ^m : — 16° 24'.								
1888.568	1.4	6.27	0.7	6.26	3	6.5	.. 8.3	L

H. A. H. 93 19 ^h 9 ^m : — 16° 10'.								
1888.704	162.0	5.11	161.2	5.11	2	8.8	.. 9.3	L
8.726	161.9	5.20	161.1	5.20	2	8.3	.. 9.0	L

1888.72			161.2	5.16		8.6	.. 9.2	
---------	--	--	-------	------	--	-----	--------	--

h 596 19 ^h 11 ^m : — 16° 10'.										
	°	"	°	"					h	
1888.535	14.9	8.15	14.1	8.14	2	6.5	. .	7.5	19.1	L

O Σ 368 19 ^h 11 ^m : + 15° 58'.										
1888.538	217.9	0.97	216.4	0.99	2	7.3	. .	8.3	18.5	L
8.543	217.8	0.87	216.5	0.87	3	7.0	. .	7.8	19.4	L
8.568	218.3	0.97	216.8	0.98	3	7.3	. .	8.0	19.1	L
1888.55			216.6	0.94		7.2	. .	8.0		

h 1381 19 ^h 12 ^m : — 16° 9'.										
1888.535	195.6	5.03	194.8	5.02	2	8.0	. .	8.1	19.2	L

H. A. H. 95 19 ^h 15 ^m : + 2° 44'.										
1888.538	336.5	. . .	335.7	. . .	2	7.0	. .	7.0	18.8	L
8.576	336.8	0.5e	336.0	0.5	2	6.8	. .	6.8	18.8	L
8.707	333.5	0.43	332.7	0.44	2	7.7	. .	7.7	19.5	L
1888.61			334.8	0.46		7.2	. .	7.2		

Schj 30 (28) 19 ^h 22 ^m : — 12° 22'.										
1888.507	327.4	1.73	326.6	1.74	2	7.7	. .	7.7	19.2	L
8.538	330.0	1.50	329.2	1.51	2	8.0	. .	8.2	19.1	L
8.568	329.7	1.55	328.9	1.56	3	7.8	. .	7.8	19.4	L
1888.54			328.3	1.60		7.8	. .	7.9		

Angle probably increasing.

β — 19^h 32^m: — 10° 14'.

B: C.

1888.535	282.8	4.19	282.9	4.21	2	9.0	. .	10.0	19.7	L
----------	-------	------	-------	------	---	-----	-----	------	------	---

Σ 2545 19 ^h 32 ^m : — 10° 24'.										
1888.436	320.0	3.46	319.3	3.47	2	6.0	. .	8.4	19.2	L
8.538	321.3	3.64	320.7	3.65	2	7.0	. .	10.0	19.4	L
8.590	321.7	3.49	321.1	3.50	3	. . .	. .	. . .	19.6	L
1888.53			320.4	3.53		6.5	. .	9.2		

Σ 2583 19 ^h 44 ^m : + 11° 32'.									
1888.702	115.6 ^o	"	115.9 ^o	"	2	...	...	...	20.1 ^h L
8.726	116.5	1.47	116.9	1.48	2	6.0	...	6.7	19.9 L
1888.71			116.4	1.48		6.0	...	6.7	
β 148 19 ^h 46 ^m : — 10° 38'.									
1888.507	326.6	0.78	325.9	0.79	3	8.0	...	8.5	19.7 L
Σ 2597 19 ^h 49 ^m : — 7° 2'.									
1888.488	89.3	1.43	89.1	1.46	2	7.4	...	8.6	19.4 L
A. C. 12 19 ^h 53 ^m : — 2° 31'.									
1888.428	321.3	1.19	320.7	1.20	4	7.0	...	8.0	20.1 L
8.488	327.0	1.07	326.2	1.08	2	7.0	...	7.6	19.7 L
8.707	326.2	1.21	325.5	1.22	4	6.8	...	7.6	19.9 L
1888.55			323.7	1.18		6.9	...	7.7	
β 56 19 ^h 59 ^m : — 4° 37'.									
1888.568	166.3	1.70	165.6	1.70	3	7.7	...	9.0	19.8 L
β 832 20 ^h 1 ^m : — 10° 57'.									
1888.507	100.1	1.32	100.2	1.34	2	8.7	...	9.2	20.0 L
β 984 20 ^h 12 ^m : + 26° 9'.									
1888.488	204.7	1.0	203.1	...	2	...	...	...	19.0 L
Schj 33 (31) 20 ^h 15 ^m : — 8° 5'.									
1888.704	220.8	2.84	219.3	2.85	2	8.2	...	9.2	20.1 L
β 60 20 ^h 21 ^m : — 18° 34'.									
1888.535	146.1	3.87	145.3	3.88	2	4.5	...	8.0	20.1 L
8.568	147.9	3.48	147.1	3.49	4	5.5	...	8.0	20.1 L
8.611	147.5	3.35	146.7	3.36	3	5.0	...	8.2	20.2 L
8.622	147.0	3.28	146.2	3.29	2	5.0	...	8.8	20.2 L
8.704	146.0	3.66	145.3	3.67	2	5.0	...	8.0	20.4 L
8.543	143.9	3.25	143.9	3.25	1	...	...	...	...
1888.60			146.2	3.49		5.0	...	8.2	

H ii 51 20^h 23^m: — 18° 11'.

1888.707	^o 174.2	['] 2.78	^o 173.6	["] 2.77	4	5.0 . . 7.4	^h 20.3	L
----------	-----------------------	----------------------	-----------------------	----------------------	---	-------------	----------------------	---

 β 63 20^h 25^m: + 10° 32'.

1888.507	348.5	0.90	347.8	0.90	2	5.7 . . 8.0	20.3	L
8.611	346.9	0.92	346.1	0.92	3	6.0 . . 7.8	21.0	L
8.622	348.4	0.83	347.6	0.83	2	6.0 . . 8.3	20.7	L

1888.59			347.0	0.89		5.9 . . 8.0		
---------	--	--	-------	------	--	-------------	--	--

O Σ 407 20^h 26^m: + 10° 53'.

1888.507	215.3	0.80	214.0	0.80	1	7.0 . . 7.0	20.6	L
8.611	219.2	0.55	218.0	0.55	3	... . . ...	20.7	L

1888.58			217.0	0.61		7.0 . . 7.0		
---------	--	--	-------	------	--	-------------	--	--

 Σ 2696 20^h 28^m: + 5° 5'.

1888.650	298.5	0.85	298.7	0.86	2	8.2 . . 8.4	20.4	L
----------	-------	------	-------	------	---	-------------	------	---

 β 65 20^h 42^m: + 5° 36'.

1888.650	187.5	1.50	186.8	1.49	2	5.0 . . 9.2	20.8	L
----------	-------	------	-------	------	---	-------------	------	---

 β 154 20^h 47^m: — 16° 35'.

1888.568	66.3	2.71	64.9	2.73	3	8.5 . . 9.5	20.7	L
----------	------	------	------	------	---	-------------	------	---

Hough 144 20^h 47^m: + 19° 43'.

1888.707	165.8	0.48	165.0	0.48	2	7.5 . . 7.5	20.9	L
----------	-------	------	-------	------	---	-------------	------	---

 Σ 2742 20^h 57^m: + 6° 44'.

1888.704	224.3	2.76	222.7	2.78	3	7.7 . . 8.0	20.6	L
----------	-------	------	-------	------	---	-------------	------	---

 Σ 2744 20^h 57^m: + 1° 6'.

1888.425	169.1	1.56	168.4	1.56	3	6.0 . . 7.2	20.7	L
8.450	169.2	1.43	168.5	1.43	4	6.5 . . 7.0	20.9	L
8.603	168.4	1.45	167.8	1.44	3	6.3 . . 7.0	20.4	L
8.644	170.5	1.56	169.7	1.56	2	6.5 . . 7.0	21.3	L

1888.51			168.5	1.49		6.3 . . 7.0		
---------	--	--	-------	------	--	-------------	--	--

β 368 21 ^h 2 ^m : — 8° 41'.									
	^o	"	^o	"				^h	'
1888.428	93.6	0.67	93.7	0.69	4	7.0	. .	7.5	20.5
8.833	93.4	0.58	92.7	0.61	3	7.2	. .	8.5	21.6
1888.60			93.3	0.66		7.1	. .	8.0	

O Σ 527 21 ^h 3 ^m : + 4° 42'.									
1888.428	114.8	0.5e	115.0	0.5	4	...	. .	...	20.8
8.450	98.6	0.4e	98.9	0.4	2	...	. .	...	21.1
1888.44			109.6	0.45		...	. .	...

H 47 21 ^h 6 ^m : — 15° 28'.									
1888.603	321.0	3.10	320.4	3.11	3	7.2	. .	7.2	21.2

O Σ 535 21 ^h 9 ^m : + 9° 34'.									
1888.450	206.3	0.35e	205.0	0.35	1	...	. .	...	L
8.543	205.2	...	203.9	...	1	...	. .	...	L
8.611	221.9	0.35e	220.8	0.35	2	...	. .	...	L
8.707	216.1	...	214.9	...	2	...	. .	...	L
1888.60			213.4	0.35		...	. .	...

Very difficult.

O. S. 106 21 ^h 11 ^m : — 27° 42'.									
1888.650	277.8	2.63	277.7	2.65	2	8.2	. .	8.2	21.4

Σ 2799 21 ^h 24 ^m : + 10° 37'.									
1888.425	125.9	1.45	125.7	1.46	3	6.7	. .	7.0	21.1
8.428	125.1	1.39	125.0	1.40	4	7.0	. .	7.2	21.0
8.450*	122.7	1.55	122.8	1.56	4	6.5	. .	6.8	21.5
1888.44			124.3	1.47		6.7	. .	7.0	

β 165 21 ^h 28 ^m : — 3° 56'.									
1888.817	177.2	5.04	176.5	5.04	2	8.3	. .	10.8	22.0

F. P. L. 21 ^h 38 ^m : — 11° 38'.									
1888.603	271.0	1.21	270.4	1.24	2	8.4	. .	9.6	21.9
8.707	269.7	1.41	269.3	1.44	2	8.3	. .	9.5	21.6
8.839	273.0	1.15	272.1	1.18	3	8.0	. .	9.4	22.4
1888.73			270.8	1.27		8.2	. .	9.5	

The only other observation is 1887 \pm 270.^o3 1.^h40 L.

β 75 21^h 50^m: + 10° 22'.

	^o	"	^o	"				^h	
1888.650	37.9	1.21	36.4	1.22	2	8.2	. .	9.0	21.8 L
8.707	40.3	1.33	38.8	1.34	3	8.0	. .	8.0	21.9 L
1888.68			37.8	1.29		8.1	. .	8.5	

 β 276 21^h 54^m: — 28° 59'.

1888.869	111.7	1.43	112.1	1.44	3	5.0	. .	7.0	22.2 L
8.872	113.3	1.54	113.6	1.55	3	5.0	. .	6.5	22.5 L
8.959	114.4	. . .	114.7	. . .	2	5.0	. .	6.5	22.5 L
1888.89			113.3	1.50		5.0	. .	6.7	

 β 802 21^h 56^m: — 17° 30'.

1888.896	244.6	3.88	243.2	3.90	3	6.0	. .	6.1	22.0 L
8.795	245.2	. . .	245.0	. . .	1	. . .	. .	. . .	. . . G
8.798	243.8	4.06	243.6	3.95	1	. . .	. .	. . .	21.7 G
1888.86			243.6	3.91		6.0	. .	6.1	

 β 170 22^h 3^m: — 19° 1'.

1888.650	62.4	. . .	61.0	. . .	2	. . .	. .	. . .	21.7 L
8.850	61.3	1.43	59.8	1.45	4	8.4	. .	8.5	22.3 L
8.833	60.3	1.76	60.8	1.66	4	8.0	. .	8.0	22.6 G
1888.78			60.4	1.56		8.2	. .	8.2	

 Σ 2878 22^h 9^m: + 7° 23'.

1888.505	126.9	1.65	126.9	1.66	4	6.5	. .	7.8	22.1 L
8.650	129.5	1.48	129.4	1.49	2	. . .	. .	. . .	22.0 L
8.707	128.3	1.47	128.3	1.48	3	7.0	. .	8.0	22.3 L
1888.60			127.9	1.56		6.8	. .	7.9	

 β 172 22^h 18^m: — 5° 24'.

1888.505	193.9	0.68	193.2	0.67	3	5.5	. .	5.5	22.5 L
8.603	195.0	0.60	194.2	0.59	4	5.7	. .	6.0	22.3 L
8.869	195.5	0.55	194.8	0.54	3	6.0	. .	6.0	22.6 L
1888.65			194.1	0.60		5.7	. .	5.8	

Σ 2909 22^h 23^m: — 0° 36'.

	^o	"	^o	"				^h	
1888.932*	144.7	3.22	144.0	3.23	4	4.1	. .	4.0	22.3 L
8.951*	145.8	3.16	145.2	3.17	3	...	. .	...	22.6 L
8.959*	325.6	3.17	324.9	3.18	4	4.0	. .	4.1	22.3 L
8.833	326.7	2.84	327.5	2.80	4	4.0	. .	4.1	23.3 G
8.934	327.7	3.10	327.7	3.05	3	4.0	. .	4.1	22.4 G
8.970*	325.8	3.14	325.9	3.09	3	...	. .	...	22.7 G

1888.93		325.8	3.08		4.0	. .	4.1	
---------	--	-------	------	--	-----	-----	-----	--

 β 844 22^h 24^m: + 5° 5'.

1888.817	307.0	...	307.0	...	1	8.8	. .	11.3	22.6 L
8.891	311.5	3.0e	311.5	...	2	8.7	. .	11.0	22.6 L
8.896	311.8	...	311.8	...	2	8.8	. .	11.3	22.6 L

1888.88		310.7	...		8.8	. .	11.2	
---------	--	-------	-----	--	-----	-----	------	--

 β 76 22^h 24^m: — 0° 46'.

1888.852	339.0	1.24	338.2	1.24	2	8.0	. .	9.7	22.5 L
----------	-------	------	-------	------	---	-----	-----	-----	--------

 β 77 22^h 28^m: — 2° 21'.

1888.650	213.1	2.56	211.7	2.57	2	8.0	. .	9.4	22.3 L
8.798	214.6	2.34	213.2	2.35	2	8.5	. .	9.2	22.4 L

1888.72		212.4	2.46		8.2	. .	9.3	
---------	--	-------	------	--	-----	-----	-----	--

 β 709 22^h 36^m: — 3° 7'.

1888.893	5.7	1.51	5.1	1.50	2	8.3	. .	9.5	22.9 L
----------	-----	------	-----	------	---	-----	-----	-----	--------

 Σ 2944 22^h 42^m: — 4° 48'.

1888.896	256.6	3.26	255.4	3.28	4	7.6	. .	7.8	23.0 L
8.806	259.8	3.79	260.2	3.73	1	7.8	. .	8.0	22.5 G

1888.88		256.4	3.37		7.7	. .	7.9	
---------	--	-------	------	--	-----	-----	-----	--

 β 177 22^h 46^m: — 22° 17'.

1888.817	274.8	2.77	274.6	2.80	2	8.0	. .	8.1	22.9 L
8.872	279.2	2.48	278.8	2.51	3	8.4	. .	8.5	23.2 L

1888.85		277.1	2.63		8.2	. .	8.3	
---------	--	-------	------	--	-----	-----	-----	--

β 178 22^h 49^m: — 5° 35'.

	^c	"	^c	"				^h	
1888.839	320.6	...	319.9	...	2	...	...	...	L
8.850	324.7	0.65	324.0	0.66	2	6.0	...	8.0	L
8.932	323.3	0.74	322.6	0.75	2	6.0	...	8.0	L
1888.87			322.2	0.70		6.0	...	8.0	

 β 384 22^h 57^m: — 19° 8'.

1888.850	254.5	1.01	253.4	1.03	2	7.0	...	9.4	L
----------	-------	------	-------	------	---	-----	-----	-----	---

 $H. A. H. 118$ 23^h 0^m: — 4° 51'.

1888.891	211.7	4.03	210.4	4.03	2	8.0	...	11.0	L
----------	-------	------	-------	------	---	-----	-----	------	---

 β 181 23^h 8^m: — 14° 0'.

1888.560	306.0	...	306.0	...	2	7.5	...	10.0	L
8.852	305.4	...	305.5	...	2	7.0	...	10.0	L
8.893	304.3	1.30	304.4	1.31	2	7.0	...	9.5	L
1888.77			305.3	1.31		7.2	...	9.8	

 β 182 23^h 11^m: — 14° 24'.

1888.603	229.7	0.66	228.1	0.68	2	8.2	...	8.3	L
8.932	224.3	0.79	222.7	1.81	2	8.2	...	8.2	L
1888.77			225.4	0.74		8.2	...	8.2	

 β 80 23^h 13^m: + 4° 48'.

1888.603	318.7	0.92	317.9	0.93	2	8.0	...	9.4	L
8.833	318.1	0.82	318.1	0.83	4	8.0	...	9.3	L
8.850	322.0	0.79	321.7	0.80	4	8.0	...	8.7	L
1888.79			319.5	0.84		8.0	...	9.1	

Angle is certainly increasing.

 Σ 3008 23^h 18^m: — 9° 4'.

1888.778	252.5	4.29	251.2	4.31	3	7.3	...	8.5	L
8.798	250.1	4.27	248.7	4.29	2	7.0	...	8.0	L
1888.79			250.2	4.30		7.2	...	8.2	

β 854 23 ^h 19 ^m : + 5° 26'.										
1888.817	88.8	1.86	88.3	1.89	2	8.5	. .	8.5	23.3 ^h	L
$O \Sigma$ 497 23 ^h 25 ^m : + 8° 51'.										
1888.560	213.1	1.24	211.7	1.25	3	8.0	. .	8.5	23.2	L
β 723 23 ^h 35 ^m : — 0° 12'.										
1888.932	168.9	4.0	168.2	. . .	2	7.0	. .	12.0	23.4	L
β 279 23 ^h 37 ^m : — 15° 9'.										
1888.921	87.0	. . .	86.3	. . .	2	5.0	. .	10.5	23.7	L
8.932	85.3	5.08	84.6	5.11	2	5.0	. .	11.0	23.7	L
1888.93			85.4	5.11		5.0	. .	10.8		
H 807 23 ^h 40 ^m : — 19° 18'.										
1888.817	139.3	5.90	138.9	5.91	2	5.8	. .	7.0	0.0	L
8.951	139.3	5.89	138.6	5.90	3	6.2	. .	7.2	23.4	L
8.973*	140.9	6.19	140.9	6.14	3	5.5	. .	6.0	23.3	G
1888.39			139.6	5.99		5.8	. .	6.7		
Σ 3046 23 ^h 51 ^m : — 10° 7'.										
1887.968	247.4	3.15	246.1	3.17	2	8.0	. .	8.6	23.8	L
8.740*	248.5	2.79	247.2	2.81	2	8.0	. .	8.5	23.8	L
8.798	248.6	2.93	247.3	2.95	2	7.8	. .	8.1	23.8	L
1888.50			246.9	2.98		7.9	. .	8.4		
β 731 23 ^h 54 ^m : — 8° 25'.										
1888.839	264.0	1.27	263.2	1.30	4	8.4	. .	9.2	23.9	L
8.850	261.8	1.43	260.7	1.45	3	8.0	. .	9.0	0.4	L
1888 84			262.1	1.36		8.2	. .	9.1		
β 281 23 ^h 57 ^m : + 1° 31'.										
1888.893	210.1	1.35	209.0	1.35	2	8.0	. .	9.3	0.1	L

Perhaps retrograde motion in angle.

OBSERVATIONS OF COMETS.

COMET 1888 a.

1888 Haverford M. T.	*	No. Comp.	Comet— $\Delta \alpha$			Comet's apparent δ			log p for α	Δ for δ	Obs.
			μ	s	δ	h	m	s			
no d											
3 29 16 55	6	9, 1	+0	4.80	+5 54.5	21 54	48.72	+ 0 46 41.0	m9.621	0.750	L
29 16 55	6	9, 2	+0	2.58	-0 12.7	21 54	48.67	0 46 44.4	m9.621	0.750	L
30 16 58 40		12, 3	-3	1.63	+1 54.5	21 57	54.58	1 55 29.9	m9.617	0.745	L
4 16 16 23 29		18, ...	+0	28.24	...	22 47	51.30	...	m9.650	...	L
16 15 40 15	4	..., 3	...	...	+7 21.2	17 43	23.5	...	...	0.704	L
23 16 5 48	5	6, 2	+3	44.17	+12 4.0	23 6	32.00	22 37 16.7	m9.681	0.622	L
23 16 14 33	6	3, 3	-1	13.62	-6 5.2	23 6	33.21	22 37 36.8	m9.681	0.622	L
24 15 17 16	7	26, 7	-0	48.31	-1 9.0	23 9	1.59	23 14 15.1	m9.690	0.693	L
25 16 14 2	8	27, 5	+1	30.58	+4 25.6	23 11	40.37	23 53 6.7	m9.666	0.624	G
26 16 1 48	9	24, 3	+0	57.12	-6 31.3	23 14	10.66	24 29 20.9	m9.631	0.631	L
26 16 9 22	10	9, 4	-2	2.80	-2 22.5	23 14	11.36	24 29 33.2	m9.631	0.631	L
26 16 5 35	11	12, 2	-2	7.83	-6 55.4	23 14	10.67	24 29 25.6	m9.631	0.631	L
5 2 15 41 12	12	23, 5	+2	36.72	+5 15.2	23 28	46.22	27 52 14.3	m9.694	0.623	L
6 15 20 32	13	24, 7	-2	17.24	-7 3.8	23 37	56.92	29 54 19.8	m9.709	0.628	L

20 15 36 8 14	30, 5	-0 37.23	-2 9.1	0 7 1.47	35 57 37.5	n9.716	0.492	L
6 1 15 25 46 15	2	+4 23.78	-4 35.2	0 27 43.97	40 8 44.2	n9.723	0.371	L
3 15 2 45 16	4, 2	+1 55.02	+1 14.8	0 30 53.29	40 46 18.6	n9.746	0.428	L
3 15 2 0 17	11, 5	-0 37.32	-1 43.3	0 30 53.29	40 46 18.3	n9.746	0.428	L
7 15 16 25 18	7, 0	+0 5.78	...	...	...	...	...	G
7 15 16 25 19	7, 3	-1 53.92	-2 11.7	0 36 43.34	41 50 39.8	n9.733	0.338	G
12 14 30 14 20	11, 6	+0 30.51	-2 15.8	0 43 24.67	43 28 52.1	n9.771	0.412	L
12 14 39 36 21	11, 4	+0 4.30	-0 45.6	...	...	...	...	L
18 14 51 18 22	6, 2	-0 13.38	+1 3.1	0 50 29.48	45 1 8.2	n9.751	0.239	L
18 14 57 8 23	5, 3	-1 26.81	+1 52.9	0 50 30.18	+45 1 15.5	n9.747	0.219	L

3mo. 30d. Nucleus elongated, or perhaps double.

5mo. 6d. Nucleus faint and ill-defined.

5mo. 20d. Nucleus round and well defined, surrounded by an envelope decidedly elongated in a direction at right angles to the axis of the tail. Tail much fainter than envelope.

6mo. 1d. Three tails seen—a long central one with a short faint one on each side. Observation made with a square-bar micrometer.

6mo. 3d. Tail as before, except that the outer ones are much fainter and shorter than the central one. Where united at the nucleus they seem to form a coma elongated at right angles to the central tail.

COMET 1888c.

1888 Haverford M. T.	*	No. Comp.	Comet— $\Delta \alpha$		Comet— $\Delta \delta$		Comet's apparent α			log $p \Delta$ for α		log $p \Delta$ for δ	Obs.
mo d h m s			m	s	'	"	h m s	o	'	"	s	"	
8 10 9 10 29	24	6, ...	+5	23.25	...	...	10 31 11.20	...	...	...	9.743	...	L
10 9 30 57	24	..., 2	...	...	+5	20.9	...	+44	50	50.1	...	0.830	L
14 8 49 5	25	6, ...	-1	58.09	...	...	11 2 7.57	...	...	...	9.774	...	L
14 9 10 28	25	..., 3	...	...	+0	39.8	...	44	32	17.0	...	0.790	L
14 8 49 5	26	6, ...	+1	42.19	...	...	11 2 7.52	...	...	...	9.774	...	L
22 8 50 50	27	15, 5	-0	17.17	+1	54.8	12 4 25.72	42	13	6.5	9.774	0.720	L
24 8 19 31	28	24, 8	+0	56.24	-2	7.4	12 19 17.91	41	18	22.8	9.779	0.658	L
30 8 14 4	29	9, 3	+0	33.67	-0	57.0	13 1 44.86	37	50	32.2	9.758	0.633	L
30 8 5 25	30	18, 6	-0	21.13	-1	7.1	13 1 42.38	37	50	58.8	9.757	0.618	L
9 24 7 35 8	31	2	-0	23.88	-10	55.4	15 9 19.28	18	58	59.6	9.655	0.665	L
29 7 54 5	32	2	+0	16.85	-7	24.5	15 27 25.29	15	26	50.9	9.584	0.700	L
10 3 7 56 23	33	4	-3	46.44	-5	32.0	15 40 31.90	12	48	36.7	9.602	0.714	L
8 8 23 49	34	2	+1	52.88	-4	29.1	15 55 36.39	+ 9	45	40.7	...	...	L

On the last four nights the comet was very faint; the comparisons were made with a square-bar micrometer.

COMET 1888c.

mo	d	h	m	s		m	s	'	"	h	m	s	'	"	s	"	
10	3	15	57	34	35	30, 10	+2	6.57	-1	21.4	6	36	24.11	+8	13	42.0	0.675
	9	16	15	28	36	30, 9	+1	9.11	-0	5.1	6	28	1.75	7	24	45.6	0.678
	17	17	13	42	37	12, 3	+2	25.96	-0	33.8	6	12	8.00	6	5	31.7	0.692
	28	14	3	49	38	39, 9	-0	3.87	-3	39.7	5	38	47.57	+3	43	19.7	0.718
11	1	12	26	36	39	12, ...	-4	18.23	...	...	5	22	23.64	...	...	...	...
12	6	8	11	26	40	15, 5	-2	50.18	-4	6.6	...	...	...	...	...	...	...
	6	9	5	15	40	12, 4	-3	1.76	-4	22.4	...	...	...	...	...	...	L ^w
	13	8	27	25	41	9, 2	-5	56.82	-5	26.2	1	12	48.31	-7	35	14.4	0.812
	14	8	6	9	41	6, ...	-9	59.12	...	...	1	8	46.01	...	...	...	L
	14	8	6	9	42	6, 2	-10	26.90	-3	23.5	1	8	46.23	7	37	19.7	0.813
1	2	8	39	23	43	..., 4	...	...	-9	38.8	...	...	...	7	14	21.3	0.876
	3	8	27	27	43	15, 5	-3	30.63	-5	3.6	0	13	48.88	-7	9	56.1	0.876

MEAN PLACES FOR 1888.0 AND 1889.0 OF COMPARISON STARS.

*	α			Red. to app. place	δ	Red. to app. place	Authority.
	^h	^m	^s				
1	21	54	44.98	^s —1.06	[°] ['] ["] +0 40 52.9	["] —6.4	Harvard S. Cat. bet. 0 and +1.
2	21	54	47.15	—1.06	0 47 3.5	—6.4	Weisse's Bessel.
3	22	0	57.26	—1.05	1 53 42.0	—6.6	$\frac{1}{4}$ (Lam + Bonn + 2 Schj).
4	22	47	23.86	—0.80	17 36 12.0	—9.7	Bonn Obs. VI+17° 4822.
5	23	2	48.55	—0.72	22 25 23.3	—10.6	Weisse's Bessel 1400.
6	23	7	47.57	—0.74	22 43 52.6	—10.6	Bonn Obs. VI+22° 4793.
7	23	9	50.63	—0.73	23 15 34.8	—10.7	Weisse's Bessel 154.
8	23	10	10.46	—0.67	23 48 52.1	—11.0	Weisse's Bessel 161.
9	23	13	14.24	—0.70	24 36 3.1	—10.9	Weisse's Bessel 233.
10	23	16	14.87	—0.71	24 32 6.6	—10.9	Weisse's Bessel 299.
11	23	16	19.21	—0.71	24 36 31.9	—10.9	$\frac{1}{2}$ (Weisse's Bessel + Rümker).
12	23	26	10.08	—0.58	27 47 10.3	—11.2	Weisse's Bessel 524.
13	23	40	14.72	—0.56	30 1 35.2	—11.6	Weisse's Bessel 832.
14	0	7	39.01	—0.31	35 59 58.7	—12.1	Weisse's Bessel 158.
15	0	23	25.18	+0.01	40 13 31.6	—12.2	Weisse's Bessel 546.
16	0	28	58.25	+0.02	40 45 16.0	—12.2	Weisse's Bessel 689.
17	0	31	30.59	+0.02	40 48 13.8	—12.2	Weisse's Bessel 766.
18	0	31		...	...	...	...
19	0	38	37.15	+0.11	41 53 3.8	—12.3	Weisse's Bessel 967.
20	0	42	53.89	+0.27	43 31 20.0	—12.1	Weisse's Bessel 1058.
21	0	43		...	43 29	...	...
22	0	50	42.42	+0.44	45 0 17.2	—12.1	Weisse's Bessel 1255.
23	0	51	56.54	+0.45	44 59 34.6	—12.0	Weisse's Bessel 1283.
24	10	25	48.74	—0.79	44 45 27.9	+1.3	Radcliffe 2509.
25	11	4	6.42	—0.76	44 31 34.3	+2.9	Weisse's Bessel 13.
26	11	0	26.09	—0.76	...	...	Radcliffe 2620.
27	12	4	43.48	—0.59	42 11 6.6	+5.1	Weisse's Bessel 47.
28	12	18	22.22	—0.55	+41 20 24.6	+5.6	Weisse's Bessel 346.

MEAN PLACES FOR 1888.0 AND 1889.0 OF COMPARISON STARS.—CONTINUED.

*	α	Red to app. place	δ	Red to app. place	Authority.
29	13 1 11.61	—0.42	+37 51 22.2	+7.0	Weisse's Bessel 1173.
30	13 2 3.93	—0.42	37 51 58.9	+7.0	Weisse's Bessel 1187.
31	15 9 43.12	+0.04	19 9 46.0	+9.0	Weisse's Bessel 171.
32	15 27 8.22	+0.22	15 34 6.7	+8.7	Weisse's Bessel 570.
33	15 44 18.08	+0.26	12 54 0.0	+8.7	Schjellerup 5602.
34	15 53 43.21	+0.30	9 50 1.7	+8.1	Mon. Not. 49, No. 6.
35	6 34 16.04	+1.50	8 15 3.0	+0.4	Weisse's Bessel 979.
36	6 26 50.93	+1.71	7 24 50.1	+0.6	Harv. X No. 59.
37	6 9 40.01	+2.03	6 6 3.9	+1.6	Schjellerup 2109.
38	5 38 49.17	+2.27	+3 46 56.7	+2.7	$\frac{1}{2}$ (W. B. V. 950 + Σ 788).
39	5 26 39.30	+2.57	...	...	Paris 6404 and Albany 1790.
41	1 18 42.67	+2.46	—7 29 57.3	+9.1	Gould G. C. 1330.
42	1 19 10.67	+2.46	7 34 5.1	+8.9	Weisse's Bessel 283.
43	0 17 20.64	—1.13	—7 4 41.9	—10.6	Schjellerup 122.

OCCULTATIONS OBSERVED DURING ECLIPSE OF THE MOON,
1888, 7^{mo} 22.

By PROF. ISAAC SHARPLESS.

	Mag.	Angle with Vert.	Phase.	Hav. M. T.
				^h ^m ^s
1	9	120°	dis.	12 0 29.8
2	9	140	"	12 41 46.4
3	9	95	"	12 48 20.6
4	8.5	90	"	13 7 55.0
5	8	110	"	13 16 0.8
6	7.5	150	"	13 38 26.4

OCCULTATION OF JUPITER, 1889, 3^{mo} 23d.

The observations were made by F. W. Peirson. They are in Haverford Mean Time.

	^m ^h ^s
First contact,	18 44 9.1
Second "	18 46 8.6
Fourth "	19 44 24.2

Light clouds were present during the greater part of the occultation. No satellites were visible and Jupiter itself was very faint.

SUN-SPOT OBSERVATIONS.

Observer, F. P. LEAVENWORTH.

Date.	No. of new		Disapp. by solar rot.		Reapp. by solar rot.		Total number		Faculæ.		Remarks.
	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Fac.	
1888 ^{mo} 8 ^d 11 ^h a.m.	1	3	. . .	. . .	. . .	. . .	1	3	. . .	. . .
15 12 m.	2	20	. . .	. . .	. . .	. . .	3	22	. . .	. . .
16 8 a.m.	0	0	. . .	. . .	. . .	. . .	3	10	. . .	. . .
17 9 "	0	0	. . .	. . .	. . .	. . .	2	3	. . .	. . .	Through clouds.
22 10 "	0	0	. . .	. . .	. . .	. . .	2	6	. . .	. . .	"
23 8 "	0	0	. . .	. . .	. . .	. . .	0	0	. . .	. . .	Definition very poor.
24 9 "	0	0	. . .	. . .	. . .	. . .	0	0	. . .	3	
9 12 10 "	4	24	0	0	0	0	4	24	. . .	. . .
13 10 "	1	1	0	0	0	0	3	15	. . .	. . .
14 10 "	1	2	0	0	0	0	2	6	. . .	. . .
18 12 m.	0	0	0	0	0	0	0	0	. . .	. . .

SUN-SPOT OBSERVATIONS.—(CONTINUED).

Observer, F. P. LEAVENWORTH.

Date.	No. of new		Disapp. by solar rot.		Reapp. by solar rot.		Total number		Faculæ.		Remarks.
	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Fac.	
1888 ^{mo} 25 ^{d.} 4 ^h p.m.	2	17	0	0	0	0	2	17	2	2	" very good.
30 10 a.m.	0	0	0	0	0	0	1	1	3	9	" poor.
11 3 3 p.m.	0	0	0	0	0	0	0	0	. . .	16	" good.

Observer, H. V. GUMMERE.

9 22 10 a.m.	0	0	0	0	0	0	2	4	. . .	. . .
26 9 "	0	0	0	0	0	0	1	2	. . .	. . .
27 9 "	0	0	0	0	0	0	1	2	. . .	. . .
28 9 "	0	0	0	0	0	0	1	2	. . .	. . .
30 9 "	0	0	0	0	0	0	1	1	. . .	. . .
10 1 4 p.m.	0	0	1	0	0	0	0	0	. . .	. . .

3 10 a.m.	1	1	0	0	0	0	0	0	0	1	1	1	...	...	Definition fine.
4 3 p.m.	0	0	0	0	0	0	0	0	0	0	0	0	...	...
5 4 "	0	0	0	0	0	0	0	0	0	0	0	0	...	...
8 3 "	0	0	0	0	0	0	0	0	0	0	0	0	...	...
9 9 a.m.	0	0	0	0	0	0	0	0	0	0	0	0	...	...	" poor.
10 4 p.m.	0	0	0	0	0	0	0	0	0	0	0	0	...	...	" very poor.
13 11 a.m.	0	0	0	0	0	0	0	0	0	0	0	0	...	...	" good.
15 9 "	0	0	0	0	0	0	0	0	0	0	0	0	...	...	" poor.
16 ...	0	0	0	0	0	0	0	0	0	0	0	0	...	...	" poor.
17 9 a.m.	0	0	0	0	0	0	0	0	0	0	0	0	...	...	" good.
20 9 "	1	2	0	0	0	0	0	0	0	0	0	0	...	...	" very good.
24 10 "	0	0	0	0	0	0	0	0	0	0	0	0	...	5	" poor.
29 10 "	0	0	0	0	0	0	0	0	0	0	0	0	...	0	" good.
30 10 "	0	0	0	0	0	0	0	0	0	0	0	0	...	0	" poor.
31 10 "	0	0	0	0	0	0	0	0	0	0	0	0	...	0	" good.
11 1 9 "	0	0	0	0	0	0	0	0	0	0	0	0	...	5	" good.
2 12 m.	0	0	0	0	0	0	0	0	0	0	0	0	...	34	" very good.
5 4 p.m.	1	9	0	0	0	0	0	0	0	0	0	0	...	2	" poor.

SUN-SPOT OBSERVATIONS.-(CONTINUED.)

Observer, H. V. GUMMERE.

Date.	No. of new		Disapp. by solar rot.		Reapp. by solar rot.		Total number		Faculae.		Remarks.
	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Fac.	
1888 11 6 2 p.m.	0	10	0	0	0	0	1	19	8	25	Definition very good.
7 11 a.m.	0	3	0	0	0	0	1	22	1	1	" poor.
12 11 "	1	8	0	0	0	0	2	30	1	9	" very good.
13 10 "	0	4	0	0	0	0	2	27	2	5	" good.
16 9 "	0	0	0	0	0	0	2	17	1	8	" good.
17 9 "	0	0	1	6	0	0	1	3	0	0	" poor.
20 10 "	0	0	0	0	0	0	1	1	4	9	" good.
21 3 p.m.	0	2	0	0	0	0	1	3	1	9	" poor.
22 9 a.m.	0	0	0	0	0	0	1	3	2	8	" poor.
30 10 "	1	25	1	3	1	25	1	25	.	.	" good.
12 1 3 p.m.	0	0	0	0	0	0	1	13	0	0	" poor.
4 10 a.m.	0	0	0	0	0	0	1	9	2	4	" good.

5 12 m.	0	10	0	0	0	0	0	0	1	19	7	14	"	very good.
6 10 a.m.	0	0	0	0	0	0	0	0	1	5	5	9	"	good.
7 12 m.	0	0	0	0	0	0	0	0	1	1	1	13	"	very poor.
8 9 a.m.	0	0	0	0	0	0	0	0	1	3	4	27	"	fair.
12 11 "	0	0	1	3	0	0	0	0	0	0	2	7	"	poor.
13 11 "	0	0	0	0	0	0	0	0	0	0	3	4	"	good.
14 11 "	0	0	0	0	0	0	0	0	0	0	0	0	"	very poor.
15 11 "	1	11	0	0	0	0	0	0	1	11	3	4	"	good.
19 3 p.m.	0	5	0	0	0	0	0	0	1	16	3	4	"	good.
20 12 m.	0	0	0	0	0	0	0	0	1	17	...	...	"	poor.
21 11 a.m.	0	0	0	0	0	0	0	0	1	8	5	19	"	good.
22 10 "	0	0	1	8	0	0	0	0	0	0	0	0	"	very poor.
24 11 "	1	1	0	0	0	0	0	0	1	1	7	20	"	very good.
25 12 m.	0	0	0	0	0	0	0	0	0	0	6	21	"	very good.
26 12 "	0	0	0	0	0	0	0	0	0	0	2	4	"	poor.
28 11 a.m.	0	0	0	0	0	0	0	0	0	0	8	15	"	good.
29 11 "	1	1	0	0	0	0	0	0	1	1	9	23	"	good.
1889 1 1 2 p.m.	0	0	0	0	0	0	0	0	0	0	10	14	"	good.

SUN-SPOT OBSERVATIONS.—(CONTINUED.)

Observer, H. V. GUMMERE.

Date.	No. of new		Disapp. by solar rot.		Reapp. by solar rot.		Total number		Faculae.		Remarks.
	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Fac.	
1889 ^{mo} 1 ^d 3 11 a.m.	0	0	0	0	0	0	0	0	10	35	Definition good.
4 12 m.	0	0	0	0	0	0	0	0	13	53	" good.
7 10 a.m.	0	0	0	0	0	0	0	0	1	2	" very poor.
8 11 "	0	0	0	0	0	0	0	0	1	1	" poor.
10 11 "	0	0	0	0	0	0	0	0	4	6	" fair.
12 11 "	0	0	0	0	0	0	0	0	3	4	" poor.
14 12 m.	0	0	0	0	0	0	0	0	0	0	" fair.
15 12 "	0	0	0	0	0	0	0	0	1	12	" poor.
16 10 a.m.	1	8	0	0	0	0	1	8	2	22	" very good.
18 10 "	0	0	0	0	0	0	0	0	12	19	" very good.
19 11 "	0	0	0	0	0	0	0	0	0	0	" very poor.
21 11 "	0	0	0	0	0	0	0	0	4	5	" good.

22 11	"	0	0	0	0	0	0	0	0	0	0	0	14	46	"	very good.
23 12	m.	0	0	0	0	0	0	0	0	0	0	0	10	39	"	very good.
25 11	a.m.	0	0	0	0	0	0	0	0	0	0	0	0	0	"	poor.
29 10	"	0	0	0	0	0	0	0	0	0	0	0	0	0	"	poor.
30 11	"	0	0	0	0	0	0	0	0	0	0	0	6	10	"	good.
31 11	"	0	0	0	0	0	0	0	0	0	0	0	12	23	"	good.
2 1 10	"	1	6	0	0	0	0	0	0	1	6	1	1	8	"	good.
7 10	"	0	0	0	0	0	0	0	0	0	0	0	4	4	"	good.
9 11	"	0	0	0	0	0	0	0	0	0	0	0	15	59	"	very good.
12 10	"	0	0	0	0	0	0	0	0	0	0	0	4	13	"	good.
13 11	"	0	0	0	0	0	0	0	0	0	0	0	4	11	"	good.
14 11	"	0	0	0	0	0	0	0	0	0	0	0	3	8	"	poor.
20 11	"	0	0	0	0	0	0	0	0	0	0	0	5	16	"	good.
21 12	m.	0	0	0	0	0	0	0	0	0	0	0	3	5	"	poor.
25 10	a.m.	0	0	0	0	0	0	0	0	0	0	0	1	1	"	poor.
26 11	"	1	14	0	0	0	0	0	0	1	14	4	4	12	"	good.
3 1 11	"	0	0	0	0	0	0	0	0	1	12	1	1	1	"	poor.
6 11	"	1	2	0	0	0	0	0	0	1	2	3	3	8	"	good.

SUN-SPOT OBSERVATIONS.—(CONTINUED.)

Observer, H. V. GUMMERE.

Date.	No. of new		Disapp. by solar rot.		Reapp. by solar rot.		Total number		Faculæ.		Remarks.
	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Fac.	
1889 ^{mo} 3 ^d 7 ^h 11 a.m.	0	2	0	0	0	0	1	4	1	2	Definition good.
8 10 "	0	3	0	0	0	0	1	7	1	1	" very good.
9 11 "	1	1	0	0	0	0	1	1	0	0	" very poor.
11 11 "	1	6	0	0	0	0	2	7	2	2	" fair.
12 11 "	0	0	0	0	0	0	2	6	1	4	" fair.
13 11 "	1	13	1	2	0	0	2	17	0	0	" very good.
14 11 "	0	0	0	0	0	0	2	5	0	0	" very poor.
18 4 p.m.	0	0	2	5	0	0	0	0	0	0	" poor.
22 11 a.m.	0	0	0	0	0	0	0	0	0	0	" poor.
23 11 "	0	0	0	0	0	0	0	0	0	0	" good.
26 11 "	0	0	0	0	0	0	0	0	0	0	" poor.
27 3 p.m.	0	0	0	0	0	0	0	0	3	8	" very good.
29 11 a.m.	0	0	0	0	0	0	0	0	1	2	" fair.
30 9 "	0	0	0	0	0	0	0	0	0	0	" poor.
4 4 9 "	1	1	0	0	0	0	1	1	0	0	" good.

[illegible]

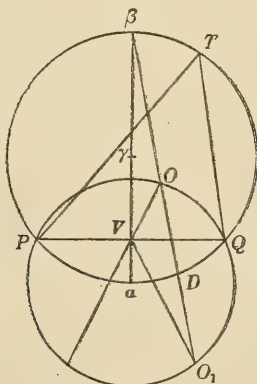
ON THE GEOMETRY OF A NODAL CIRCULAR CUBIC.

(From the *American Journal of Mathematics*, xi. 4.)

Schröter and Durège (*Math. Annalen*, Bd. v.) have considered the circular cubic with double focus on itself. From a remark in a paper by Humbert (*American Journal*, x. 3, p. 279) the case, when the curve is nodal, has been studied by Quetelet, but I have not been able to find Quetelet's work. I give here a geometrical treatment of this case, which Quetelet calls the "focale á nœud." Some properties of the special case, when the inflexion is at infinity, were given by Booth (*Quarterly Journal*, vol. iii), under the name of the logocyclic curve.

§ 1. Let two tangents, OP , OQ , be drawn to a conic U , and let a conic U^1 , through OPQ , meet U again at $P_1 Q_1$. Then we know that the tangents at $P_1 Q_1$ meet at a point O_1 on U^1 . In proof project $P_1 Q_1$ to the circular points on the line D ; then we have tangents OP , OQ to a circle U , and the circle OPQ or U^1 obviously goes through the center O_1 of this circle. Also OO_1 is conjugate to PQ and $P_1 Q_1$ with regard to U^1 . We shall need the following Lemmas from the geometry of the circle:

Fig. 1.



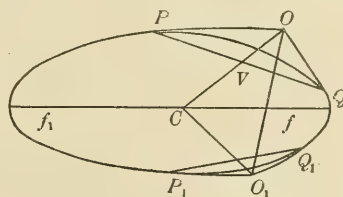
(1) Let OO_1, PQ be conjugate chords of a circle α , then the lines joining the ends of one to the center of the other make with it equal angles. For let β be the pole of PQ . The centers of all chords through β lie on the circle α , whose diameter is $a\beta$, hence if D be the center of OO_1 the angle $PD\beta$ equals angles $QD\beta$, also each is half angle $P\alpha Q$, and hence $\angle PO_1Q$.

(2) Since OV, O_1V are equally inclined to PQ at its center (Lemma 1) they meet the circle in points equidistant from P, Q ; hence angle $POV = \angle QOD$.

We may notice the corollaries that (1) the lines bisecting the angles POQ, PO_1Q also bisect VOO_1, VO_1O and hence, by Lemma 1, meet on PQ , so that $PO : OQ = PO_1 : O_1Q$, whence in a cyclic quadrilateral, whose diagonals are conjugate, the rectangles of opposite sides are equal; (2) $OV, O_1V = PV^2$.

Returning to the conic U , let U^1 be a circle. We have the common chords PQ, P_1Q_1 of the circle and conic equally inclined to either axis, and therefore the radii CO, CO_1 equally inclined to either axis. Also from Lemma 2 angle $COP = \angle O_1OQ$, and therefore $CO f_1 = O_1O f$. Hence the point O_1 has reference only to $O, f f_1$ and is the same for all confocal conics when O is fixed; so that if we draw tangents from a fixed point O to a confocal family the circles through O and the points of contact have a common radical axis (a result given in Wolstenholme, Problem 1079). The point O_1 clearly lies on the special circle $O f f_1$, and also on the special circle (orthogonal to $O f f_1$) through O and the imaginary foci $G G_1$. We have, of course, $CO \cdot CO_1 = Cf^2$.

Fig. 2.



We know that the locus of P or Q is a circular cubic, having a node at O , the nodal tangents bisecting the angle $F O F_1$; and that the cubic is also the locus of the feet of normals from O to the conics and of feet of perpendiculars from O on its polars with regard to the conics. See a paper in the *Messenger of Mathematics*, April, 1887, where I have given some of the geometry of this cubic, showing in particular that the tangents to it at P, Q meet at a point T on the cubic, so that $P Q$ are "corresponding points;" that $O P, O Q$ subtend equal or supplementary angles at any point of the curve (the fundamental property); in particular that they make equal angles with either nodal tangent; that if $P Q$ meets the cubic again at R , $O R$ is perpendicular to $P Q$, and T, R are corresponding points, and that O is the center of a circle touching $T P, T Q, P Q$ (the latter, of course, at R). The angles which $O P, O Q$ subtend are equal when R is between $P Q$, otherwise supplementary.

From what precedes all circles through the node O and two corresponding points $P Q$ pass through a fixed point O_1 ; and, D being the center of $O O_1$, $O P, O Q$ subtend equal angles at D . Hence, from the fundamental property of the cubic, D is on the curve (fig. 3). The line $O V$, which bisects the lines joining corresponding points, is parallel to the asymptote, for it is normal to the circle of infinitely large radius which is a limiting form of the confocal ellipses, *i.e.*, it goes through the point at ∞ on the curve, K suppose. Now $O V, O D$ make equal angles with a nodal tangent (Lemma 2); hence D, K correspond. But, $I J$ being the circular points, the line at ∞ , $K I J$, is perpendicular to any line, and hence to $V O K$. Hence $I J$ correspond, and the tangents at them meet on the curve at D ; or D is the double focus.

Any circle whose center is D will have double contact with the cubic at $I J$, for $D I, D J$ are tangents to both curves.

Since D, K correspond, angle $D Q O =$ angle $K Q O$, and if $Q D$ meets the cubic again at Q_1 angle $D Q_1 O =$ angle $K Q_1 O$. Hence angle $Q O Q_1$ is right, or any chord through the double focus subtends a right angle at the node.

Let the line joining any point H on the curve to $P Q$ meet

the curve again at $p q$ (see fig. 6, where, however, H is special). Then, since angles $O H P$, $O H Q$ are equal or supplementary, angles $O H p$, $O H q$ are equal or supplementary, and therefore p , q also correspond. Conversely the lines joining P , Q to p , q meet in two points on the curve, which also correspond. (See Salmon, Plane Curves, p. 132.) The point O being equidistant from the lines joining corresponding points to any point on the curve (fundamental property) must be equidistant from the four lines $P p$, $P q$, $O p$, $O q$; or the four lines joining one pair of points to another pair touch a circle whose center is the node, and intersect again on the curve. (Compare the paper above referred to.)

In particular $Q D Q_1$ and $P K$ (fig. 3) meet on the curve, so that $P Q_1$ is parallel to the asymptote. Hence $O V$, which bisects $P Q$, also bisects $Q Q_1$, or the locus of centers of chords through the double focus is the line through the node parallel to the asymptote.

The angle $P D Q = \text{twice angle } P O_1 Q \text{ (Lemma 1)} = 360^\circ - \text{twice angle } P O Q$. But O being center of circle inscribed in $T P Q$, $P O Q = 90^\circ + \frac{1}{2} P T Q$. Hence $P D Q = 180^\circ - P T Q$, or the circle circumscribed to the triangle formed by two tangents from a point on the curve and the chord of contact goes through the double focus. It is clear (see fig. 1) that the tangents to the circle $O P Q$ at P , Q meet on the circle $T P Q$. The locus of the center of this latter circle may be seen to be a hyperbola of no apparent interest.

Let $H H_1$ be the chord through D perpendicular to $O O_1$. Since $H H_1$ is perpendicular to $O D$, $H H_1$ correspond. Hence $O H$, $O H_1$ make equal angles with the nodal tangents, and since $O H$, $O H_1$ are at right angles ($H H_1$ passing through D) they bisect the angles between the nodal tangents. Also, $H H_1$ being perpendicular to $O D$, the tangents at $H H_1$ are parallel to the asymptote. These points are of great use later.

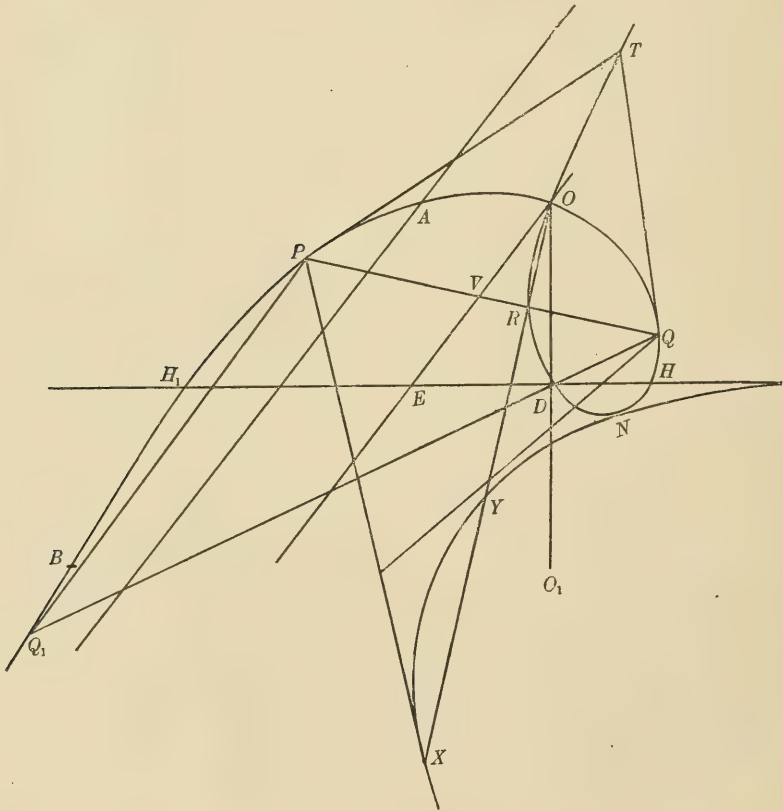
Since D , K correspond, the tangent at D meets the asymptote on the curve, at A , suppose. Since $O D$, $O K$ subtend equal angles at D , the tangent and the asymptote are equally inclined to $O D$. Also $A O D$ is a right angle, since $A D$ is a chord through the double focus. Hence if E is the center of $H H_1$, $A O D E$ is a rectangle.

§ 2. In connection with what follows see Salmon's *Plane Curves*, pp. 278–281.

The bicircular quartic, with a finite node, being the pedal of a conic and the inverse of another conic, a circular cubic is the pedal of a parabola and the inverse of a conic with regard to a point on it, and the cubic in question having perpendicular nodal tangents is the pedal of a parabola with regard to a point on the directrix and the inverse of a rectangular hyperbola with regard to a point on itself.

Since V is on a fixed line and PQ makes equal angles with OV , O_1V we see that PQ envelops a parabola with focus O_1 and directrix OV ; and OR is perpendicular to PQ . Thus we see *ab initio* that the curve is the pedal of a parabola. That it is the inverse of a hyperbola follows by reciprocation, or may be obtained directly from the fundamental property.

Fig. 3.



We now show that the tangents to the parabola from P, Q (which are perpendicular to OP, OQ) touch the parabola where OR meets it. It is enough to show that if PQ, PX be tangents to a parabola the perpendiculars from X to PQ and from P to PX meet on the directrix. But these are perpendiculars of the triangle formed by PQ, PX and the tangent consecutive to PX . And we know that the orthocenter of any tangent triangle is on the directrix. It is obvious that PX, QY intersect on the polar of O ; *i. e.*, the line O_1B parallel to HH_1 , and also on the circle $OPQO_1$. When QR coincide (at N in fig.) since the tangents at P, Q meet on the cubic, and PQ is the tangent at Q , P must be the inflexion, and since it is the intersection of tangents from P, Q to the parabola, it must coincide with B , where the polar of O meets the cubic. Hence the inflexion and node are equidistant from HH_1 . The curves clearly touch at N , and ON is the common normal. Since B, N correspond, OV bisects BN . Hence the tangent from the inflexion to the cubic is bisected by the parallel to the asymptote through the node.

If p, q correspond, then angles ORp, ORq are equal (fundamental property). Hence OR and its perpendicular PQ make equal angles with Rp, Rq and hence divide pq harmonically. Making pq coincide with PQ , the line PRQ is divided harmonically at the contact with the parabola.

It is worth while to call attention to the fact that D bisects OO_1 . It may be proved (but is apart from the present purpose) that the four double foci of a nodal bicircular quartic bisect the lines joining the node to the foci of the conic which is the negative pedal of the quartic.

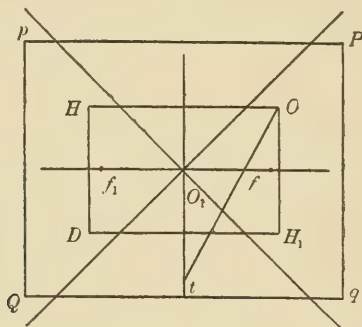
§ 3. We will now obtain the position of the four single foci of the cubic by considering the cubic as the inverse of a rectangular hyperbola with regard to a point O on it.

The tangent at O inverts into a parallel to the finite asymptote. The parallels to the asymptotes through O become the nodal tangents. The four foci of the hyperbola become the four foci of the cubic. The following consideration may aid in clearing up this last point, which is usually stated without proof. Let O be the origin, and let a point F whose co-ordi-

nates are a, o be a focus of a curve. Let $F_1 G_1$ be antipoints of O, F ; the co-ordinates of f_1 , are $a|2, i a|2$. The circle $O F$ is $x^2 + y^2 - a x - i a y$, or $(x + i y)(x - i y - a) = 0$; *i. e.*, it breaks up into the imaginary lines $O F_1 I, F_1 F J$. Since the latter is a tangent to the curve, so also is the circle. Since $O F_1^2 = O = O G_1^2$, when we invert the antipoints and the circular points are interchanged, the circle becomes a tangent through a circular point, and F remains a focus of the inverse curve.

Since the tangents at corresponding points of a curve and its inverse make equal angles with the radius vector, the images of O with regard to the axes will become the points $H H_1$ at which the tangents are parallel to the asymptote.

Fig. 4.



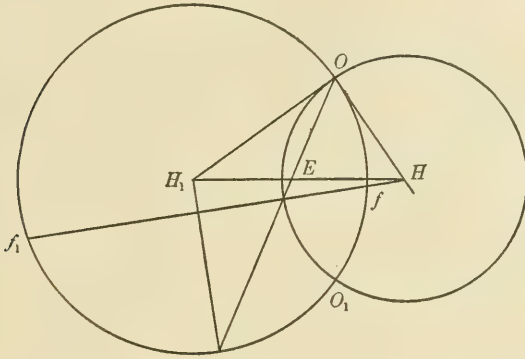
The end of the diameter through O lies on the circle $O H H_1$ and hence becomes the point where $H H_1$ cuts the cubic, that is, the double focus. The ends of any diameter become corresponding points. The foci $f f_1$ of the hyperbola are on the axis $f f_1$, which inverts into a circle through O with center H_1 . They are also on the circle $O f f_1 H$. If the tangent at O meets the conjugate axis at t , then the angle which the circle makes with $O t = \text{angle } t H O = \text{angle } t O H$, hence in the cubic the foci lie on the line through H , which makes with the asymptote the same angle as $O H$, and are the points where this line is cut by the circle through O with center H_1 .

Interchanging H and H_1 we have the imaginary foci, the antipoints of the real foci.

Since (fig. 5) H is the pole of $O O_1$, with regard to the circle whose center is H_1 and radius $H O$ or $H O_1$, we see that $O O_1$ and $f f_1$ are conjugate chords. Hence $D O f, f_1 D O$ are similar triangles, and (cor. 2 to Lemma 2 at the beginning) $O D^2 = D f \cdot D f_1$, a result generalized later.

It is clear that the focal circle with center H_1 and radius $H_1 O$, being the inverse of an axis, cuts the cubic orthogonally at points where the curvature is stationary.

Fig. 5.



In the hyperbola we have $f P - f_1 P = \pm K$, when P is on the same branch as O .

Hence on inversion

$$\frac{f P}{O f \cdot O P} - \frac{f_1 P}{O f_1 \cdot O P} = \pm K,$$

+ for the loop, because the branch of the hyperbola away from O inverts into the loop; f is now the focus inside the loop. To determine K take P at H_1 where $H_1 f = H_1 f_1 = H_1 O$,

$$\text{then } \frac{1}{O f} - \frac{1}{O f_1} = -K,$$

$$\text{and hence } \frac{f P \pm O P}{O f} = \frac{f_1 P \pm O P}{O f_1},$$

where for points on the loop we take the + sign.

Again, in the hyperbola we have $Pf \cdot Pf_1 = P O_1^2$, $O f \cdot O f_1 = O O_1^2$, and hence on inversion

$$\frac{Pf}{O P \cdot O f} \cdot \frac{Pf_1}{O P \cdot O f_1} = \left(\frac{P O_1}{O P \cdot O O_1} \right)^2, \quad O f \cdot O f_1 = O O_1^2,$$

whence $Pf \cdot Pf_1 = P O_1^2$,

so that the cubic is the locus of a point whose distances from three fixed points are connected by the relation $r_1 r_2 = r_3^2$. It is to be noticed that O_1 is not a focus. In the linear relation above connecting the distances from f, f_1, O we may regard O as an improper focus, for the line from it to a circular point fulfills the condition for a tangent.

From the general case when we take any conic and a point off it we get that the product of focal distances of P is in a constant ratio to the rectangle of segments of a chord from P to a fixed circle, namely, the inverse of the director circle. The ratio becomes an equality when the fixed point is on the conic, in which case the quartic becomes a cubic.

From the equation $Pf \cdot Pf_1 = P O_1^2$ we get that the line of foci meets the cubic at points on the circle $H_1 D O_1$, as well as at H .

The cubic is its own inverse with regard to H or H_1 (fig. 6). For let $H P p$ be a chord through H . We have to show $H P \cdot H p = H O^2$. Inverting, we have (fig. 4) a circle through $O H$, and $P p$ are clearly on a line parallel to $f f_1$. We have to show in the hyperbola

$$\frac{H P}{O H \cdot O P} \cdot \frac{H p}{O H \cdot O p} = \frac{1}{H O^2},$$

or $H P \cdot H p = O P \cdot O p$, which is obvious.

This clearly applies to any nodal cubic.

Join $P p$ to H_1 , cutting the cubic at $q Q$. We have shown above that $P Q, p q$ (since they join corresponding points to a point on the curve) are corresponding points, that $Q q$ goes through H , and that the four lines touch a circle with center O . Also since $H P \cdot H p = H Q \cdot H q = H O^2$ the four points lie on a circle orthogonal to the circles whose centers are H, H_1 and radii $H O, H_1 O$; hence the center of this circle is on OD , the

meets the cubic at r , clearly Or is a perpendicular on it, and since ROr is a right angle (fig. 3) Rr goes through D and bisects OV .

We thus have what is probably the simplest geometrical definition. Let O be a fixed point. Take Z on a fixed line through it, join Z to a fixed point D , and take R on ZD such that $ZR = ZO$. The locus of R is a right circular cubic of which O is node, OZ parallel to the asymptote, D double focus. From this definition the curve might be readily developed.

Returning to fig. 6, we may see by inversion that the diagonals PQ, pq meet on OD . This is, however, the known fact that when a quadrilateral is inscribed in one circle and described about another, the diagonals (and also the lines joining opposite points of contact) meet at a point on the line of centers. (See Casey's "Sequel to Euclid," pp. 108, 94.)

We see that the cubic is the locus of intersections of tangents from fixed points to circles with a given center. The quadrilateral formed by the tangents is cyclic when the points subtend a right angle at the center.

§ 4. By projecting and reciprocating the cubic we have properties of any nodal cubic or tricuspidal quartic. The following may be mentioned:

(1) Any two points on the curve and the points of contact of tangents from them lie on a conic. For the circle TPQ goes through D .

(2) Let PP_1, QQ_1 be pairs of corresponding points. Then the joining lines meet at corresponding points RR_1 . Also if any line through the node O meet PP_1, QQ_1, RR_1 at pqr and the curve at K , then a line can be drawn through K , which with OK divides PP_1, QQ_1, RR_1 harmonically, and cuts the curve at corresponding points.

(3) Let P, Q be corresponding points, T their tangential, R the point where PQ cuts the curve again. Any line through T is divided harmonically by OR, PQ , and the curve, and any line joining corresponding points has the same property. If qTq_1, qp are the lines, pq goes through R .

(4) If from R in (B) we draw tangents RX, RY , join XY to any corresponding points XY , cutting the curve at corre-

spending points $\xi \eta$, then $xy\xi\eta PQ$ lie on a conic, and a conic will touch the lines joining xy to $\xi\eta$ and pass through PQ .

(5) The line joining corresponding points touches a conic, which touches the cubic at the 3 sextactic points, and touches the nodal tangents at points on the line of inflexions. Each tangent is divided harmonically by the corresponding points, the remaining point where it meets the cubic, and its point of contact with its envelope.

(6) A complete quadrilateral is inscribed in a nodal cubic. The lines from the node to the angles of the diagonal triangle meet the sides of the triangle on the cubic.

(7) A tangent to a cardioid meets it in two points, the tangents at which meet the tangent at the vertex at points equidistant from the vertex.

Questions in relation to some here treated are given in the *Educational Times Reprint*, xxxviii., p. 82, xlii., p. 81, xliii., p. 77, by McIntosh and Wolstenholme.

FRANK MORLEY.

ON THE PERIOD OF ROTATION OF THE SUN.

PETERS* was probably as early as anyone to remark that the period of rotation of the sun, without farther limitation, was a meaningless term.

In a series of observations on sun spots, taken at Naples during the years 1845-6, he found among his results discrepancies larger than could be explained by errors of measurement; but what is more striking, these discrepancies were always in one direction. In short, he showed that each heliocentric latitude has its own period of rotation.

The law, according to which this velocity varies with the distance from the equator, Carrington† has placed beyond doubt.

His work, however, is all confined to the photosphere or the immediately underlying region in which the sun spots have their seat.

A few years later Braun and Hornstein,‡ independently, discovered in the magnetic elements a pretty well marked variation, having a twenty-six-day period. This at once suggested a means of getting the rotation period of the solid (?) nucleus of the sun.

For Braun (*Phil. Trans.*, 1876), from two years' observations, finds that the large disturbances of the horizontal component of the earth's magnetism were nearly all confined to the days on which one of three solar meridians was presented to the earth. But this needs confirmation, for the total number of disturbances observed was not large. However, the *phase*§ of this disturbance, unlike those of the annual and secular variations, is the same in all parts of the earth, seeming to indicate

**Proc. Amer. Assoc. Adv. Sci.*, Vol. IX, p. 87 (1855).

†Carrington: *Observations on Solar Spots*, London, 1863.

‡Hornstein: *Ber. Wien. Akad.*, Bd. 64, p. 62, Bd. 67, p. 385 (1873).

§Braun: *C. R.* t. 76, p. 698.

that we have here to deal with solar action which is direct and not intermediate.

On the other hand, solar temperatures appear to preclude the possibility of the sun being a permanent magnet. So that the region of sun whose period Braun and Hornstein and, later, Liznar* have determined remains completely unknown, but with the probability of its being below the photosphere.

A fairly pronounced twenty-six-day variation in the daily range and height of both the thermometer and the barometer has been known for a long while. But no theory, in any degree tenable, has been offered to explain the connection of this variation with the sun. We are, therefore, also unable to assign this period to any definite solar height. But there are reasons (*Ency. Brit.* art. *Meteorology*) for thinking that it is the rotation period of the same part of the sun as that given by magnetic variations. In this case the three particularly active solar meridians, discovered by Braun, would appear to be essentially regions of great thermal, rather than magnetic, activity. That these variations are due primarily to the direct heating effect of the sun is the basis on which Faraday, Christie, De la Rive, and Stokes have each with varying success explained the subject of terrestrial magnetism.

But if the rotation period is to be determined from barometric and magnetic disturbances, then regions of special solar activity must be assumed to be persistent. Evidence of this from other sources is doubtful, though the observations of Sporer on sun spots and Wilsing on faculæ would seem to indicate that these outbursts have a tendency to recur at the same place.

Doppler's principle has already been applied, by Zöllner, Vogel, and Young, to the determination of the relative velocities of the extremities of a solar diameter. Here we have under investigation probably a different part of our luminary, *viz.*, the seat of selective absorption for the Fraunhofer lines, a layer of considerable thickness mixed up with and extending into the photosphere. So that this method probably gives the period of a region higher than that of the sun spots.

*Liznar: *Ber. Akad. Wien.*, Bd. 91, p. 454.

Later, Wilsing,* of Potsdam, has measured by means of photography the daily angular motion of a large number (1012) of persistent faculæ. Since these are seen as elevations in passing over the sun's limb and give brighter spectra † than surrounding portions of the solar surface, there is reason for thinking that the period thus obtained by Wilsing is that of a region some distance above the photosphere.

There are, then, at least four distinct solutions of the problem in hand:

(a) The observation of sun spots, giving the period of the lower parts of the photosphere for various latitudes. The data in our possession are here limited to a zone extending a little less than 45° on each side of the equator.

(b) The observation of the meteorological (including magnetic) elements, giving the period of an unknown region, possibly of the more solid interior, possibly of the region of the great uprushes around the spots.

(c) The measurement of the difference of refrangibility of light coming from the eastern and western limbs of the sun, suggested by Zöllner.

Since the accuracy of this method varies as the cosine of the latitude, observations are, at present, of no value for parallels higher than 75° .

(d) The observation of faculæ, giving the period for a layer probably a few hundred miles higher than the photosphere. Present data extend from 24° S. to 33° N.

Each of these methods gives the synodic period.

The object of the work communicated in this paper is to measure the rotation for a zone some 60° wider than any hitherto observed and to verify or disprove the conclusion which appeared to follow from some observations made a year ago.‡ The measurements then at hand gave for the daily angular motion, θ , of any point on the sun's absorbing layer, as a function of the heliocentric latitude, z ,

*Wilsing: *Publicationen des Astrophysikalischen Observatoriums* (1884).

†Lockyer: *Chemistry of the Sun*, p. 105.

‡Crew, *Amer. Jour. Sci.*, Feb., 1888.

$$\theta = .838' (1 + 0.00335 \lambda),$$

which makes the velocity a minimum at the equator, the place at which, for sun spots, it is a maximum.

There was also, apparently, a systematic error* in the first series, depending either upon the heating of the spectroscope or upon some cause which varied with the date of observation.

This, I hope, has been eliminated in the second set of measurements, which are here given.

They were made with the same instrument, viz.: the large spectrometer of the Johns Hopkins University, but with the three modifications which follow.

The method of shifting the sun's image across the slit was so changed that almost any solar latitude could be observed at any time.

This was accomplished by a device suggested by Professor Rowland. The brass ring which held the condensing lens was furnished with a metal arm, not unlike the handle of a palm-leaf fan. This arm was pinned to a brass collar, larger than the lens and surrounding it. This pin was the axis, parallel to the optical axis of the lens, about which the lens rotated through a small arc, throwing the image of the sun, now with its eastern, now with its western, limb on the slit. But this collar, besides having adjustable stops to limit the motion of the lens, could also be rotated in its own plane, and clamped in any azimuth, thus changing the direction of the motion of the image across the slit. To make this latter change was the only purpose of this part of the apparatus. For a reflecting prism was inserted between the condensing lens and the collimator, and by rotating this, any desired portion of the sun's limb could be made tangent to the slit. This having been done, the image would, in general, no longer move at right angles to the slit; so the device above described was used to counterbalance the effect of the prism on the direction of motion. The prism was by Steinheil and gave very perfect definition.

The Fahrenheit heliostat, with two mirrors, used in the first

* Discussion of this in *Observatory*, April, 1888.

series, was replaced by a better instrument of the Foucault pattern.

Two of Professor Rowland's gratings were used. That designated as "No. 1," I had used before. It was four inches long, ruled with 14,436 lines to the inch, and gave superb definition in the 4th order. The other, "No. 2," was a six-inch grating, with 7218 lines to the inch, and gave fair definition in the 8th order.

The objectives of the collimator and telescope had each a clear aperture of six and one-half inches.

The angle between their optical axes remained constant, the grating being movable.

In the first series, the grating was so placed that its normal and the diffracted ray were both on the same side of the incident ray, a position which shall be denoted by "right;" while, in the second series, the normal and the diffracted ray were on opposite sides of the incident ray, a position called "left." This change, as we shall presently see, has a very decided effect on the result.

The method of observation was very simple. The adjustment of the instrument having been tested, as accurately as could be, by setting on an atmospheric line, the cross hairs were then set on the solar line whose displacement was to be measured, and the micrometer read.

The sun's image was then shifted by a cord convenient to the observer at the eye-piece, and the micrometer read for the opposite limb. Ten settings of this kind were made in succession, and then a new latitude was chosen.

Formula.

The value of the relative linear velocity of the two limbs at the equator, $v' - v''$, was computed from the following formula which, together with the method of obtaining the heliocentric latitude, was sufficiently discussed in connection with the first series.*

* Professor Oliver has been kind enough to call my attention to an error in the formula as used in the computation of the first series, viz., the omission of the factor "2" from the last term of the right-hand member, the effect of which was to make the result there given some three per cent. smaller than it should have been.

The corrected value from the previous measurements is

$$v' - v'' = 2.565 \text{ mi. per sec.}$$

and daily angular motion at equator = $838'$.

$$v' - v'' = \frac{c}{\lambda \cos \chi} \cdot \frac{1}{\cos h} \cdot \frac{\sqrt{1 - \sin^2 \chi \cos^2 \chi}}{\cos \chi \cos \theta} + 2 a \sin \varphi$$

Where {

- c = value of one revolution of the micrometer screw in Angstrom's units.
- V = velocity of light, in miles per second.
- Δ = displacement measured in micrometer revolutions.
- λ = wave length of line whose displacement is measured.
- χ = heliocentric latitude.
- h = half the angle subtended at the center of the sun's image by that portion of the slit covered by the sun's image.
- θ = inclination of the plane of the solar equator to the ecliptic.
- φ = angular semi-diameter of the sun as seen from the earth.
- a = linear velocity of the earth in its orbit, in miles per second.

Observations.

The following table includes all the observations made, except three in which a radial slit was used. The difficulty of setting on the end of such a line is so great that these have been discarded, and only those made with tangential slit are retained.

TABLE I.

1	2	3	4	5	6	7	8	9	10	11
No. of obs.	Date.	Mean time of obs.	Line.	Grating.	Displace- ment. Δ	Helio- centric latitude Z	$(v'-v'')$ $-2\alpha \sin \phi$ δ	Average discrep- ancy.	Direction of diameter measured.	Wght
		H. M.			Rev.	$^{\circ}$	M.p.sec.	%		
1	July 6	12 12	5166.4	No. 1	0.0905	4.4	2.165	6	N.W.-S.E.	50
2	June 18	11 09	5914.3	2	0.1121	8.1	2.099	6	N.W.-S.E.	20
3	July 11	10 58	5166.4	1	0.0824	8.9	1.990	11	N.E.-S.W.	50
4	June 19	11 36	D_1	1	0.1076	14.3	2.100	13	N.W.-S.E.	10
5	"	11 50	"	"	0.1116	15.2	2.187	11	N.W.-S.E.	20
6	July 6	11 54	5166.4	"	0.0843	16.3	2.095	8	N.W.-S.E.	40
7	July 3	11 24	5914.3	"	0.1089	17.5	2.188	10	N.W.-S.E.	20
8	June 18	11 52	"	2	0.0990	18.3	1.932	12	N.W.-S.E.	20
9	June 16	11 33	D_1	"	0.1224	18.5	2.410	14	N.W.-S.E.	10
10	July 11	10 39	5166.4	1	0.0764	21.9	1.966	11	N.E.-S.W.	45
11	June 19	12 14	D_1	"	0.0993	24.0	2.056	9	N.W.-S.E.	18
12	July 3	11 36	5914.3	"	0.1023	24.3	2.150	14	N.E.-S.W.	27
13	July 3	12 24	"	"	0.1050	24.4	2.210	15	N.W.-S.E.	36
14	June 18	10 56	"	2	0.0881	24.8	1.799	12	N.W.-S.E.	18
15	July 3	12 36	"	1	0.0995	25.1	2.106	12	N.W.-S.E.	27
16	June 18	12 06	"	2	0.0966	25.6	1.985	8	N.W.-S.E.	18
17	June 19	12 54	D_1	1	0.1044	30.4	2.289	17	N.W.-S.E.	18
18	June 18	12 34	5914.3	2	0.0802	32.5	1.763	10	N.E.-S.W.	24
19	July 6	12 24	5166.4	1	0.0749	32.8	2.131	12	N.W.-S.E.	40
20	June 18	12 22	5914.3	2	0.0920	39.3	2.202	13	N.W.-S.E.	8
21	"	11 21	"	"	0.0871	39.6	2.101	10	N.W.-S.E.	16
22	July 3	11 10	"	1	0.0681	43.1	1.786	11	N.W.-S.E.	21
23	"	12 03	"	"	0.0866	43.6	2.291	11	N.E.-S.W.	14
24	July 11	1 06	5166.4	"	0.0415	45.7	1.420	23	N.E.-S.W.	35
25	June 18	1 45	"	2	0.0567	45.8	1.534	13	N.E.-S.W.	21
26	July 6	11 21	"	1	0.0625	49.6	2.300	6	N.W.-S.E.	36
27	"	12 56	"	"	0.0406	56.6	1.762	15	N.W.-S.E.	25
28	July 11	11 30	"	"	0.0414	57.1	1.824	18	N.W.-S.E.	25
29	June 18	1 32	"	2	0.0513	58.8	1.872	16	N.E.-S.W.	15
30	July 6	11 05	"	1	0.0457	58.9	2.112	15	N.W.-S.E.	25
31	June 19	12 45	D_1	"	0.0621	60.0	2.347	18	N.E.-S.W.	10
32	July 6	10 49	5166.4	"	0.0276	62.3	1.418	19	N.W.-S.E.	25
33	July 6	81 11	"	"	0.0248	72.1	1.932	30	N.W.-S.E.	18
34	July 3	10 58	5914.3	"	0.0300	72.7	1.941	25	N.W.-S.E.	9

These observations are arranged in the order of their solar latitudes, given in *column 7*.

Column 6 gives the difference between the readings of the micrometer, on the eastern and western limbs of the sun respectively. The relative equatorial linear velocities, computed from the above formula, will be found in *column 8*.

In *column 9* is given the average discrepancy (in per cent.) among themselves of the ten settings which make up each

observation. May it not be that local currents—solar gusts—have something to do with the large irregularities in this column?

Column 10 gives the quadrants in which lay the extremities of the solar diameter under observation. This, together with the latitude, completely determines the points at which the slit was made tangent.

Each weight in *column 11* is the product of the cosine of the latitude by a number depending on the definition and the grating, and was determined from notes taken at the time of observation.

Six of the observations were made by Mr. Louis Bell, Fellow in Physics of the Johns Hopkins University; the others by the writer. Neither of us, at the time, had the slightest idea in what latitude we were observing. The value of the mean relative equatorial velocity thus obtained is

$$v' - v'' = 2.173 \pm 0.028 \text{ mi. per sec.},$$

a velocity some 15 per cent. less than that obtained in the first series, *viz.* 2.565 *mi. per sec.*

But this, as Professor Young has pointed out, is just what one would expect, since all the settings of the first series were made with the grating “right,” and all those of the second with the grating “left.” For the heating effect of the sun on the slit-plate will, in the first case, introduce an error with a positive sign, and, in the second case, with a negative sign; but these errors will not be equal in amount.

I attempted to detect any heating effect by observing atmospheric lines, and, failing to discover any motion when the image was rapidly shifted from one jaw of the slit-plate to the other, I concluded that this effect would be negligible in measuring the displacement. But this is not true, because, in the latter case, the sun has more time to heat the plate.

When we consider that, if the whole difference between the two results were due to the heating of the slit-plate, the displacement of an atmospheric line on the micrometer would be only $\frac{1}{1000}$ of the distance between D_1 and D_2 , it will not be surprising that it was not detected by direct observation of the motion.

Without knowing what displacement of the slit by heat would be required to harmonize the two results, I computed the amount of this error as follows: Of two thermometers, placed one on either side of the slit, that in the sun's image indicated at the end of one minute, (the average time of a complete reading), an excess of 10°C over the other.

If the angle of incidence be denoted by i , the angle of diffraction by r , the order of the spectrum by n , the wave-length by λ , and the grating space by e , then

$$\sin i + \sin r = \frac{n\lambda}{e} = \text{constant.}$$

$$\therefore dr = -\frac{\cos i}{\cos r} di$$

where di is the *angular* displacement of the slit and dr is the resulting *angular* displacement at the micrometer. When the eastern limb of the sun was on the slit the displacement was always in a direction opposite to that when the western limb was observed, so that these effects were added.

Not only so, but since the increment di is negative when the grating is "right," dr will be positive and the reading of the micrometer will be too large. If now the grating be turned "left," di will be positive, and hence the micrometer reading too small.

There were 20 revolutions of the micrometer to the centimeter, and the ratio of the focal length of the telescope to the collimator was 1.08; so that if we call the micrometer error dm and the *linear* displacement of the slit ds , then

$$dm = -20 \times 1.08 \times \frac{\cos i}{\cos r} ds \text{ micrometer revolutions.}$$

The condensing lens had a clear aperture of 8^{cm} with a focal length of 135^{cm} , thus giving an image of 1.25^{cm} diameter.

The jaws of the slit-plate were of blackened brass, were a little wider than the sun's image, and expanded toward the slit. If we assume that the expansion took place throughout that part covered by the image, then for 10°C ,

$$ds = \pm 1.25 \times 10 \times 0.000019 = 0.000238 \text{ centimeters.}$$

$$\therefore dm = \pm 0.0052 \times \frac{\cos i}{\cos r} \text{ micrometer revolutions.}$$

For either grating in the position "right," the value of $\frac{\cos i}{\cos r}$ was approximately, for all lines observed, 0.84:

$$\therefore dm = + \overset{\text{rev.}}{0.0044}$$

But in the position "left," $\frac{\cos i}{\cos r} = 1.19$,

$$\therefore dm = - \overset{\text{rev.}}{0.0062}$$

The divergence between the first series and the second, due to this cause, would therefore be that produced by a difference of $\overset{\text{rev.}}{0.0106}$ in the micrometer readings. Now the mean value of the displacement due to rotation, for latitudes less than 30° , was $\overset{\text{rev.}}{0.099}$; for latitudes between 30° and 75° , was $\overset{\text{rev.}}{0.060}$. So that the heating effect would explain for lower latitudes a divergence of 11 per cent., and for higher latitudes, a difference of 18 per cent. between the results of the first and second series. It is thus fully competent, on the assumptions we have made, to explain the discrepancy between a velocity of 2.565 mi. per sec., obtained in the first series, and 2.173 mi. per sec., obtained in the second.

Dividing this error in the ratio $\frac{0.0044}{0.0062}$, we have for a final value:

$$v' - v'' = 2.403 \pm 0.026 \text{ mi. per sec.,}$$

which corresponds to a sidereal period of 26.23 days, or a daily angular motion of $824'$.

It is to be observed that this result is independent of any assumption as to *how much* the slit is heated.

The divergence between the two series has simply been divided in the ratio of $\frac{\cos i}{\cos r}$ for the position "right" to $\frac{\cos i}{\cos r}$ for the position "left."

To determine the change of angular velocity with latitude, I have drawn through the observations of the *second* series the straight line which most nearly represents them, and find by the method of least squares its equation to be:

$$\theta = 802^\circ (1 - 0.00206 \chi^\circ)$$

where θ is the daily angular motion, and χ the heliocentric latitude, expressed in degrees. This would indicate acceleration as we approach the equator. The *first* series gave:

$$\theta = 838' (1 + 0.00335 \chi^\circ).$$

Since the error due to heating affects the higher latitudes more than the lower, in the ratio of the secants of the latitudes; and since it enters the two series with opposite signs, the co-efficients of χ , in any accurate work, *ought* to have opposite signs, always provided there was in reality no very marked change of angular velocity with latitude.

Combining these two expressions:

$$\theta = 823' (1 + 0.00065 \chi^\circ).$$

The co-efficient of χ is too small to put much stress upon, when we consider the necessarily large errors in the observations from which it was derived. As it stands, however, it indicates that points in latitude 45° rotate in 18 hours *less* time than points at the equator, while Carrington's expression for sun spots,

$$\theta = 865' (1 - 0.191, \sin^{\frac{7}{4}} \chi^\circ)$$

would make the rotation period at 45° some $2\frac{1}{2}$ days *longer* than at the equator. The difference between the two is quite marked. Can it indicate that the spectroscope measures the velocity of regions, corresponding in some degree to upper or lower "trades," the angular velocity of each of which would *decrease* from the equator to poles?

But it is not easy to think of any cause competent to produce "trades" on the sun, since no certain difference of temperature* between equator and pole has ever been discovered. The evidence afforded by these observations, therefore, is, that *no certain variation of period with latitude has been detected by the spectroscope.*

Wilsing (*l. c.* p. 436) has examined the motion of faculæ with reference to this same phenomenon, but failed to find any "drift" or change of velocity with latitude.

The following table may, I think, be considered as fairly

* Young's *Sun*, p. 264.

representing the best determinations of the *sidereal* period of points on the equator.

		Days.
From Barometer and Thermometer.	{ <i>Hornstein</i> —from daily range of barometer at Prague } during the year 1870,	24.12
	{ <i>Braun</i> —from daily average of barometer at Singa- pore, 1841–1845,	24.13
	{ <i>Van der Stok*</i> —from daily average of barometer,	24.10
	" " range " "	24.11
	" " average " thermometer,	24.10
	" " range " "	24.14
	{ <i>Von Betzold†</i> —from thunderstorms in Bavaria and Wurtemberg,	24.12
Variation of Magnetic Elements.	{ <i>Hornstein</i> —variation of magnetic elements at Prague and St. Petersburg during 1870,	24.51
	{ <i>Braun</i> —variation of magnetic elements at Greenwich and Makerstown during five years, between 1844 and 1870,	24.18
	{ <i>Lienar</i> —magnetic disturbances (storms),	24.29
Photosphere. Equatorial values.	{ <i>Carrington</i> —from sun spots—seven years' observations,	24.97
	{ <i>Sporer</i> — " " "	24.60
	{ <i>Wilsing</i> —from faculae,	25.23
	{ <i>Crew</i> —by spectroscope, equatorial value,	26.23

It will be observed that the lowest value by any one method is higher than the highest of the next preceding. May this not correspond to a physical fact, viz., that as we pass from the more central portions of the sun, up through the photosphere, faculæ, and absorptive layer, there is a gradual decrease of angular velocity?

HENRY CREW.

Haverford College, April 16, 1889.

* Van der Stok: *Natuurkundig Tijdschrift voor Nederlandsch-Indie*, Deel 48.

The observations extend over 7740 days, were made in the tropics where the amplitude is large, and are entitled to great weight.

† *Nature*, April 11th, 1889.

ON THE SYMBOLIC USE OF THE COLORS BLACK AND WHITE IN GERMANIC TRADITION.

I.

IT is the object of this paper to ascertain what notions have been connected by Germanic popular fancy with the symbolic use of the colors white and black. The popular mind, not fantastic medieval science, is what we must interrogate.¹ When M. Frédéric Portal in his book, "*Des Couleurs Symboliques*,"² tells us that black united with any other color gives the latter a contrary meaning, because black is a negation; or that, in the blazon, black indicates "*prudence, sagesse et constance dans la tristesse et les adversités*," we feel at once that this is artificial and quite useless for our purposes. Even the far more solid work of the Abbé Auber, "*Histoire et Théorie du Symbolisme Religieux*,"³ deals with learned opinions rather than with popular belief. Folk-lore, superstition, popular traditions, as well as the incidental expressions of those writers who have said or sung in close sympathy with homely life and every-day opinions, must furnish our material.

It is the color-symbol which is to be considered, not the color-sense. The latter has of late awakened considerable interest; first brought into prominence by a hint from Gladstone and a paper by Geiger,⁴ it has been treated by a number of scholars not only from the physical but also from the philological point of view. This forms no part of our present purpose. Nor yet is it the strict color-metaphor that claims attention. All words are "*verblichene metaphern*," and in the process of linguistic abstraction, the meaning attached to colors, particularly to the

¹ The material here presented is mainly from German folk-lore and legend. A second paper is intended to examine English folk-lore and English literature.

² Paris, 1837, pp. 133, 177.

³ Paris—Poitiers, 1870-71: 4 vols.

⁴ "*Ueber den Farbensinn*," read at Frankfurt, 1867.

notion of light or of dark, would be of the utmost importance. Inquiry into this subject was begun by Jacob Grimm in his essay on "Die Fünf Sinne,"¹ and has been taken up and continued by F. Bechtel in his book "Ueber die Bezeichnungen der sinnlichen Wahrnehmungen in den indogerm. Sprachen."² Bechtel shows how the notion "bright" lies at the root of many an Aryan word; A. S. *glæd* still meant "gleaming" as well as "cheerful;" A. S. *háðor* explains G. *heiter* just as our "sheen" explains G. *schön*; A. S. *wlite* still connoted "light." For such a color-metaphor one might collect a host of expressions, like A. S. *beorht wela*; *beorhtode beneswég*; *leoht sefa*; *hlátre móde*; or to the material given by Grimm³ and Bechtel⁴ for the connection of the bright and the loud (G. *hell*, e. g.), we could add A. S. *stefn in becóm heaðotorht hlynnan*;⁵ or Swinburne in his "Erechtheus:" "Like fire are the notes of the trumpets that flash through the darkness of sound;" or for the etymology *schwarz* = Lat. *surdus*, defended by Grimm and Bechtel, questioned by Kluge,⁶ we could instance the connection of thought in (Milton, "Samson Agon."): "The sun to me is *dark and silent* as the moon when she deserts the night, *hid* in her vacant interlunar cave."⁷

This color-metaphor, however, is not our subject, but rather the color-allegory. How have men of our race regarded the *symbolic force* of the colors black and white? In myth, in legend, and in those expressions which by matter or manner reflect popular feeling, we find a sort of dualistic parallel in which

¹ Haupt, Zst. VI, 1 ff. Kl. Schr. VII, 193 ff.

² Weimar, 1879.

³ In the essay named above and also in "Die Wörter des Leuchtens u. Brennens," Kl. Schr. VIII, 263 ff.

⁴ Op. cit., p. 94.

⁵ "Beowulf," 2552 f.

⁶ Wörterbuch s. v.—It is curious that Russian peasants use the word *tma*, "darkness" instead of the word for "tenthousand;" here the dark is the unknown. Cf. Hehn, "Kulturpflanzen und Hausthiere," p. 446. Cf. also the Danish expression "snakke sort" = to talk unintelligibly, in riddles.

⁷ For the disputed etymology "dove" = "deaf"—Skeat gives "dive" *dúfa*, *dúfan*—cf. Hehn, op. cit., p. 280. He explains "dove" = "deaf" by the dark color of the former.

the notions of light, summer, warmth, cheer, health, life, goodness, are opposed to the notions of darkness, winter, cold, harm, sickness, death, sin. If we come into a position where it is necessary to apply a color to one of the first set of notions, we think at once of white, the color which Goethe calls cheery and pleasant; while the other set of notions quite as readily will call for black. The use of the colors white and black to indicate good or ill is so simple a matter, thinks J. Grimm, and is so easily developed, that it is not to be claimed for Germanic or any other particular mythology. Grimm is discussing the verses of a M. H. G. poet:¹ “*eya glücke, eya heil, nu hâstu mir daz swarze teil allenthalben zuo gekart, mir sint die wîzen wege verspart, die ich wilên ane gienc;*”² and, indeed, white for good fortune, and black for bad, is an evident symbolism, supported by a hundred figures of speech, and leading through easy stages of metaphor and myth back to that primitive battle between Light and Darkness which Kuhn calls “the foundation of the religious myths of most Aryan races.”³ In other words, the dualism of light and darkness would thus seem to have expressed for our race, as for the east, the higher dualism of good and evil. In this case the traditions of our Germanic forefathers would exactly agree with the lore acquired from the east, and those old divinities of the north, who still hover in the shadow of folk-lore, would be ranged in opposing squadrons of light and dark spirits,—like the actual *Ljósálfar* and *Dökkálfar* of Scandinavian myth.

But the affair is not so simple. Grimm in another place roundly declares that our heathen forefathers had no dualism.⁴ Lippert, with a point of view sundered infinitely from Grimm's, says the same thing: the *Seelencult* from which this branch of the anthropological school derives all myths, knew only harmful and helpful, but not good and evil spirits; and all these

¹ Haupt & Hoffmann's Altd. Blätter, I, 372; reprinted Kl. Schr. VIII, 11.

² Cf. the opening lines of “Parzival,” Walther v. d. Vogelw. 124, 37 (Lachm.); and Vilmar, “Deutsche Altertümer im Heliand,” p. 15 ff.

³ Abhandl. Berl. Akad., Phil-Hist., 1873, 123 ff.

⁴ D. M.⁴, 822; III, Vorrede, p. VII.—Cf. also Wuttke, “Deutscher Aberglaube der Gegenwart,” p. 11.

powers, helpful and harmful alike, were thrown into black discredit by the new theology.¹ If this is true, black could not have been the "badge of hell," or of evil, for our Germanic sires; and such a lack of sinful connotation must have shown itself in later survivals. Moreover, every one knows how many ghostly, uncanny and death-boding associations belong to the color white. In view of this confusion, the investigation of our popular color-symbolism, so far as black and white are concerned, may not be without some profitable result.

The most evident dualism offered by nature is that of day and night, of light and darkness. Light belongs with day and with the sun. The boon of bright fire has not furnished words for light but rather for darkness—perhaps "black" itself. The darkness of hell-flames is theological, as the constant "*svefle fyr, sweart*," of our old homilies can testify. But, independently of clerical influence, this attribute seems to belong to flame: with A. S. "*se þe hie of þam mirce generede*," i. e., from the flames of the fiery furnace,² cf. O. N.: *Margefu mér þá þann er mik um mirkvan beri vîsan vafrlaga*.³ "Das Licht ist heilig, nicht das Feuer," says Menzel, in his "Christliche Symbolik;"⁴ and it is day, sunshine, the gracious influences of dawn, which have made light holy, and have connected it with cheer, certitude and hope. Night brings doubt and fear. While artist and poet picture night as a majestic being,⁵ the popular notion conceives a half hostile and often repulsive person.⁶ While Greek tragedians made night mother of the gods, and called her "holy," or "dear;"⁷ while even Sigdrifa,

¹ "Religion d. europ. Culturvölker," p. 235; "Christenthum, Volksglaube u. Volksbrauch," p. 225.

² Daniel, 448.

³ Skirnism, 8.

⁴ I., p. 281.

⁵ Grimm, D. M.⁴, 614 f.

⁶ Ibid., 619, 625, 627, III, 226.

⁷ A Greek MS. of Isaiah (9th or 10th century), has an illustration showing the prophet between the figures of Night and Morning. Night is a majestic female, while Day is a little boy with a torch. In the cathedral at Chartres, Day is a youth, Night a woman with long hair. A separate figure, "Caligo," is often used to symbolize darkness—a mournful, dejected female.—Piper, Myth. u. Symb. d. Chr. Kunst, II, 359.

waking from the enchanted sleep, cries in equal veneration for night and day:

Heill dagr !
 heilir dags synir !
 heil nótt ok nipt !
 oreiðum augum
 lítið okkr þinnig,
 ok gefit sitjondum sigr !¹

while the elves name night *svefnagaman*, "sleep-joy;" while the blessings of slumber may often have been transferred to its ally,²—still, the prevailing notion of night was unfriendly. Night has always moved primitive man to a vague dread. "Night," says an old proverb, "belongs to the spirits:" "the night is no man's friend." Milton may praise night for her retirement, the scholar's boon; but Milton's master, Spenser, calls her "cheareless night," and accuses her of dismaying men "with darkenes sad;"³ elsewhere he gives her an "uncomely face," which she hides with a "blacke veile." "Cheareless night" exactly expresses the popular notion. The old antithesis survived in the fable that Memnon's statue gave out a joyful sound when it greeted day, but a mournful note at nightfall. The gathering darkness had an uncanny influence; spirits of harm—not evil, as we understand it—then came abroad and could range at will till daybreak. Hence a Scandinavian word for twilight, *tusmrøke*, goblin or giant-darkness.⁴ This time of half-lights and gloom seems to have been more uncanny than deeper night. Any sudden gloom has the same effect, especially the eclipse. During an eclipse of the sun it is in some places customary to cover up all wells in order that no poison shall fall into them, for at such a time the air is thought to be full of poisonous dew.⁵ This connection of eclipses or dark-

¹ "Sigrd." 3.—A tale from Russian folk-lore, quoted by Tylor in his "Prim. Cult.," I, 342, puts night and day on equal terms.

² For Høðr, Balder's brother, as the harmless side of night, cf. Uhland, "Mythus v. Thôr," p. 146.

³ F. Q. III, 12. 1. VII, 7. 44.

⁴ Cf. Mannhardt, Germ. Mythen, 187.

⁵ Wolf, Beitr. z. d. Myth. 235; Zst. f. d. Myth. IV, 147.

ness and poison may be meant in a verse of the "Völuspa;"¹ at the approach of evil the gods deliberate "who has filled all the air with poison;" and Heusler explains this to mean "who has taken the light from heaven." Poison, moreover, is often connected with intense cold, and cold goes with darkness.

This hour of gathering gloom has its opposite in the morning twilight and the approach of jocund day. It is a time fatal to all evil spirits; ghosts and witches slip back to their homes, and if a troll or giant should then be smitten by a ray of the rising sun, he is straightway turned to stone.² So ends the flyting of Hrimgerd; daybreak turns her to stone:

þars þú i steins líki stendr.³

In savage myths, too, the sun has this wholesome power of petrifying evil spirits; and examples occur in plenty.⁴ A lingering survival of the belief is the superstition that bad souls die at daybreak;⁵ or the vague Danish tradition that King Olaf was able to transform giants into stone.⁶ Sometimes the giant, fiend, or what not, changes into a *black* stone: "*blev til flintesten sorte.*"⁷

Common folk keep in mind the gracious influences of dawn. Anglo-Saxon leechdoms often mention the time as suitable for gathering or using worts; although in some cases either twilight may be meant: *nim þas wyrta þonne dæg and niht scade.*⁸ For deeds of magic the absence of sunshine is important. Thiele⁹ tells of preparations for raising sunken treasure where one takes nine calves and feeds them on wheaten bread and milk in a room *hvor Solen i fire Aar ikke kom til at skinne paa dem.* In this way they become prodigiously strong and are able to lift anything.

¹ Edda, ed. Hildebrand, 29; C. P. B. I, p. 196; Heusler, Völuspa, p. 40.

² For classical and other parallels, cf. Tylor, "Primitive Culture," I, 352 note.

³ Helgakv. Higr., 30. Cf. also Alvismál, 35.

⁴ A. Lang, "Myth, Ritual and Religion," 1, 152.

⁵ Cf. Müllenhoff, "Sagen, Märchen u. Lieder Schlew.-Holst. u. Lauenburg," Kiel, 1845, Book IV, Song L.

⁶ W. Müller, "Geschichte u. System d. altd. Religion," p. 316 ff.

⁷ Danish song, quoted D. M.⁴, 457.

⁸ Ed. Cockayne, II, 356. Cf. also D. M.⁴, p. 1000, III, 365.

⁹ "Danmarks Folkesagn," 1, 347.

The physical dualism of night and day is so clearly marked by nature that we find in folk-lore little confusion in the symbolism of darkness and light. One fact, however, must be noted. There is little love of night, but there is certainly fear of day. Midnight is the ghostly hour; but the hush of noonday has also its uncanny attributes, and Carl Haberland¹ brings together German, Slavonic, Greek, Roman and Hindu material to show that many spirits appear at noon as well as midnight. This superstition seems strongest in Bohemia and Poland, but can be traced through all folk-lore.

Parallel with the nature and influence of night run those of cold. The north is "Mitternacht," the south is "Midi." Dr. Brinton regards the "adoration of the cardinal points" as a part of primitive culture.² The east, birthplace of light, and with it the south, would be the beneficent part of the sky; the west would symbolize death, the north darkness and cold and destruction. There dwelt the Aztec god of death. "The great spirit of the dead, said the Ottawas, lives in the dark north, and there in the opinion of the Monquis of California, resided their chief god, Gumongo."³ Instructive for our parallel is Dr. Brinton's note⁴ on the related Aztec words *miqui* to die, . . . *te-miqui* to dream, *cec-miqui* to freeze; and it is equally interesting, in connection with statements of Germanic mythology, to know that the Algonkin word for the moon is identical with words for "night, death, cold, sleep and water." The west, like the north, had for the Indians a race of gods "who produced sickness and pains."

Turning to our own myths, we find a similar belief. By the Mosel there is a superstition that, in calling to the devil, one must face the north.⁵ Scandinavian belief placed its gods in the north, whither the devout Norseman always turned when he prayed. Here, too, dwelt Hindu and even

¹ Zst. für Völkerpsychol. u. Sprachw., 1882: "Die Mittagsstunde als Geisterstunde."

² "Myths of the New World," pp. 67, 90 ff.

³ Ibid., 93.

⁴ Ibid., 133.

⁵ Zeitsch. f. d. Mythol., I, 242.

Roman gods.¹ Since the Christians looked eastward in prayer, the north was regarded as the place of devils: "bei der abrenuntatio musste man gegen sonnenuntergang² mit gerunzelter stirne, zorn und hass ausdrückender gebärde . . . schauen."³ Hel's kingdom lay in the north;⁴ and there dwelt for later and converted Norsemen the devil and his crew. This was a Germanic belief, for the A. S. Genesis⁵ affirms the same thought.⁶ "To the north," "to the mountains," was as good as "to the devil," as Grimm notes from Swedish sources;⁷ and to this we may add the admirable parallel from an A. S. charm against a wen, lately printed by Professor Zupitza in Haupt's Zeitschr.⁸

Wenne, wenne, wenchichenne, her nescealt þu timbrien ne nenne tun hebben,
ac þu scealt north eonene to þan nihgan berhge. . . .

Similarly a Finnish incantation conjures the pestilence to go "*in stahlharte berge, in den dunkeln norden.*"⁹

Important is the dislike for north and west which appears in old judicial forms. Grimm¹⁰ has collected the facts. The judge looked eastward, with the accuser south, and the accused north of the judicial position. The possible criminal must be nearest the north. "*Mitternacht und norden hatte aber insgemein den begriff des schauerlichen, traurigen und bösen. . . . Der nachrichter kehrt dem armen Sünder, der enthauptet werden soll, das gesicht gegen die nachtseite.*" . . . The doors of the hell-mansion in the "*Völuspa*" are turned to the north. "Norden hiess den Jüten *den Sorte* (der schwarze)," which shows the truth of our parallel. In short, "bad things" are

¹ Grimm, G. D. S., 681.

² Simrock says "Nordwärts," Myth., 506.

³ Grimm D. M., 28.

⁴ Ibid., 669.

⁵ V, 32.

⁶ Fairies, however, live on the *south* side of hills.

⁷ D. M.⁴, III, 295.

⁸ XXXI, 45 ff.

⁹ D. M.⁴, 994.

¹⁰ R. A., 808 f.

apt to come from this dark, cold quarter of the sky.¹ Of still greater interest, because of probably greater antiquity, is the hanging of old Germanic criminals on a tree that faced the north, "*oppa enne northhaldne bâm*,"² and we are further informed that such criminals covered the head with a black cloth, *thene swarte dôc*. Among other races similar belief. "Der Insel-Ehste schlachtet kein Tier bei Nordwind, weil dessen Fleisch alsdann nicht weich wird."³ Sacred lore runs the same way. In the decoration of churches, says the Abbé Auber,⁴ on columns or the like, we find "*mauvaises bêtes placées au septentrion*." The same author⁵ says that Christ was crucified facing the west, with his right hand to the north; for he came to call sinners, and the north is the "*côté des pécheurs et du démon*"—referring, of course, to Isaiah xiv, 13: "I (Lucifer) will sit . . . in the sides of the north."⁶ Indeed, all that is "*nuisible ou désagréable à l'homme*" comes from the north. "*Au contraire le Midi désigne . . . les choses les plus douces. Son souffle est celui de l'Esprit Saint*." As with Indian and German, so in medieval tradition, the west belongs to hurtful powers; "*l'Occident désigne frequemment le regne de Satan, prince des ténèbres*." Lactantius⁷ explains that God separated his own kingdom from the realm of Satan, giving the latter the west for its darkness and the north for its cold (*occidens, tenebræ; septentrio, frigus*.) Bad spirits thronged the north,

¹ Grimm reminds us, however, G. D. S.,³ p. 681, that certain ceremonies point to an earlier reverence for the north, the home of the gods. East, west, south, one threw an axe to mark court limits; but the north was unbounded: "*es muss für frevelhaft gegolten haben gegen die heilige seite zu werfen*." Hence, perhaps, the "dark" north, because unbounded, dim.

² Frisian law apud Grimm R. A., 683. For the general custom, cf. Tacitus, "Germania," c. XII. Hanging was then no ignoble punishment: "*proditores et transfugas arboribus suspendunt, ignavos et imbelles et corpore infames cæno ac palude . . . mergunt*."

³ Haberland, "über Gebräuche u. Aberglauben beim Essen," Zst. f. Völkerpsych. u. Spr., XVII, 360.

⁴ "Histoire et Théorie du Symbolisme Religieux," III, 445.

⁵ II, 442.

⁶ Cf. Skeat's note Clar. Pr. Ed. "Piers Plowman," to Pass. 1, v. 118, with reference to Chaucer's Frere's Tale, where the fiend lives "in the north contre."

⁷ Cf. Lippert, "Christenthum, Volksglaube u. Volksbrauch," p. 560.

as Milton and Shakspeare knew.¹ "La Pucelle," I, Hen. VI, v. 3, invokes the aid of such spirits "under the lordly monarch of the north." Striking is the account given in the "Olaf Tryggvasonarsaga," II, cap. 57,² of an incident in the conversion of Norway. One Thidrandr heard in his yard a great trampling of horses *from the north*, and there came nine women *clad in black and on black horses*, with drawn swords, and attacked him. *From the south* hurried up to his help nine *white-clad women on white horses*. . . . Not only bad spirits dwelt in the north, but bad men and bad races. Kemble³ quotes a passage about the "xxii regna ad ubera aquilonis de eadem gente nefandissima." An English version of the ballad of "Lady Isabel and the Elf Knight,"⁴ makes the murderer come from the north, as Holofernes does in Judith: "venit Assur *ex montibus ab aquilone*." Bad luck is of the north. In Scotland women walk thrice around a chapel or church in order to have easy delivery; they begin at the east *and go southward, following the sun*. It is very bad luck to go northward.⁵ The old school of good-livers had a maxim that the bottle should pass around with the sun. That the north, which held our old Germanic gods, was once the source of good luck, but yielded to the odium which fell on the deposed divinities, is shown by the superstition that a woman, in order to learn witchcraft, must take *a black hen* under her arm and *walk thrice around a church, against the sun*.⁶ So, too, the Norwegian Fossegrim teaches the art of music to any one who of a Thursday evening, with averted head, offers him *a white kid* and throws it into *a northward flowing waterfall*.⁷ To make a love-cake—which will have the same effect as a love-potion—one must have meal that has been ground *against the sun*.⁸ A fountain

¹ Dyer, "Folk-lore of Shakspeare," p. 60.

² Quoted by Mannhardt, "Germ. Mythen," p. 573.

³ "Salomon and Saturn," p. 119.

⁴ Child, Ballads,² I, 51, 58f.

⁵ Kuhn-Schwartz, "Norddeutsche Sagen," p. 471, note.

⁶ Wuttke, "Deutscher Aberglaube," p. 245.

⁷ Grimm, D. M.⁴, 408.

⁸ Ibid., p. 922.

in Halle, which flowed northward, foretold an approaching famine.¹

The north is used as a synonym for ill-favor, like "cold," "chill" and similar adjectives. "You are now sailed into the north of my lady's opinion," "Twelfth N.," III, 2. "When I was born, the wind was north," says the mournful Marina, "Pericles," IV, 1. Outright is the symbolism with Clough: "My wind is turned to bitter north that was so soft a south before;" and the list could be indefinitely extended. Nowhere is the hostile omen of the north better expressed than in old Frisian law, where winter and darkness are represented as ruthless invaders: "Si illa tenebrosa nebula et frigidissima hiems in hortos et in sepes descendit"—a bold personification.² The north wind is often called the "*schwarze Bise*."³ Winter, like night and storm-cloud, is the dragon of many a myth: For the Scandinavian, that famous "catastrophè," or "night" of the gods, will be preceded by a terrible winter, "er kallaðr er fimbulvetr, þá drifr snær or ollum ættum, frost eru þá mikil ok vindar harðir; ekki nýtr sólar; þeir vetr fara þrir saman, ok ekki sumar i millum."⁴ A favorite emblem for winter as well as darkness is one of man's fiercest enemies, the wolf.⁵ The home of Grendel, in "Béowulf," is marked by *wulfhleoðu* and *hrínde bearwas*.⁶ Winter is used as convertible term with Death in many old folk-rites;⁷ and the metaphor is universal. Mommsen mentions an Etruscan belief that souls came up out of hell in the autumn. We have seen that Scandinavia put Hel's empire far in the north. Whether punishments were known in this cheerless realm has been a question which

¹ Grimm, D. S. No. 105.

² Grimm, D. M.⁴, 635.

³ Laistner, "Nebelsagen," 88 ff.

⁴ Gylfag., 51.

⁵ Laistner, Nebelsagen, p. 30. The boar was also a symbol for winter (Piper, op. cit., II, 332), and the boar carries Anger in an old picture of the Seven Deadly Sins (Menzel, op. cit., II, 11). Cf. Tylor, P. C., I, 341, where Red Riding Hood is instanced as a sort of sun-myth.

⁶ B., 1358, 1363, ed. Holder. Heyne reads *hrínge* with same meaning.

⁷ D. M.⁴, 639. Piper, op. cit. II, 333.

most answer negatively. Bugge sees in the *Völuspá* imitation of Church legends and the Sibylline books, while Dietrich thinks the heathen Norsemen developed of themselves a belief in a place of future punishment.¹ The way to Elfland lies through darkness and mysterious waters; but this is distinct from hell.² Part of the punishment, if we admit it, for the Scandinavian hell, lay in its ice-cold streams; a cold now expressed by the trope of sharp knives, now by that of serpents and poison.

A fellr austan of eitrdala
 sǫxum ok sverþom; Slífr heiter sú . . .
 sál sá standa sólo fjarre
 nástrondom á : norðr horfa dyrr.
 fello eitrdropar inn of ljóra :
 sás undenn salr orma hryggjom.³

Dante and Milton have united the horrors of both extremes, heat and cold—"many a frozen, many a fiery alp."⁴ Satan has his "royal seat" in the north of hell.⁵ So it is with all the mediæval visions of hell. In "Salomon and Saturn"⁶ the fall of the angels is described, together with their fate: God condemned them to

wunian in wylme, wôp þrôwian,
 héaf under heofenum : and him helle gescôp,
wælcealde wíc wintre bedeakte ;
wæter insende and wyrmgeardas,
atol deor monig irenum hornum . . .

Again, the west—as place of darkness?—is often connected with hell. In "Salomon and Saturn"⁷ is asked: "forhwâm biþ seo sunne réad on æfen?" Answer: "forþám héo lôcað on helle."⁸ In the Master of Oxford's Catechism, this is repeated: "Wherefore is the son rede at even?—For he *gothe*

¹ "Die deutsche Wasserhölle," Haupt, Z. IX, 185 ff.

² Thomas of Erceeldoune, ed. Brandl, Stanza 28.

³ "Völuspá," Müllenhoff's text, ed. Heusler, 21, 23.

⁴ Cf. for cold P. L. II, 587 ff. and Claudio in Shakspeare's "M. for M.," III, 1.

⁵ P. L. V, 775 ff.

⁶ Ed. Kemble, p. 173.

⁷ Pp. 191, 199, 120.

⁸ In another place: "*ufan* on helle."

toward hell." In a MS. quoted by Kemble, to the question "where the sun shineth by night," is answered, "the belly of the Leviathan," "the second season *it shineth in hell*," and thirdly, an island Glið "where souls of holy men rest till doomsday."

However, the north bears off the chief infernal honors. Mostly, it is true, ghosts bring with them very hot blasts from hell. But Thiele¹ tells of one Strande's wife, who helped her husband move a boundary-stone. Now she stands o' nights by the spot and shivers and cries: "Strande, *jeg fryser!*" Moreover, people now and then assign infernal qualities to hail or snow. In 1249 hailstones fell at Quedlinburg, which destroyed men and cattle: "they were gray and *stank like sulphur*."²

Lastly, cold and winter furnished the Germanic mind with its best standards and illustrations of misery. Exile—"wretchedness," *elend*, *elland*—for background, and the rigors of winter for active harm, make up the familiar picture. The "wretch" must "*hreran mid hondum hrímcealde³ sæ*,"—"winter-*cearig ofer waðema gebind*;" he may dream a moment of his old lord, then wake "*wineleas*" to see "*hréosan hrím and snaw hægle gemenged*."⁴ Equally emphatic is the horror of cold, as painted by the Seafarer.⁵ Weland, according to another poem, goes into "winter-cold exile."⁶

We have already noted signs of an older reverence for the north. The "law of opposition," as our good friends the Abbé Auber and M. Frédéric Portal term it when they want to explain why one thing can be the symbol now of good and now of bad, is found in the case of north and south, just as it was in the case of night and day. Noon was the "*Geisterstunde*" as well as midnight; and the south has its uncanny side. To be sure, the summer, or rather the coming of summer, was the symbol

¹ "Danmarks Folkesagn," II, 126.

² Pröhle, Unterharz-Sagen, p. 20.

³ Loki's son, the wolf, is called *hrímkalda*.—"Lokas," 49.

⁴ "Wanderer," 4, 24, 41 ff. Cf. also 102 ff.

⁵ Vv. 8-20; 31 ff.

⁶ "Deor," 4.

f all that is good;¹ but winter was not always bad. Greek, Roman and ancient German looked to the north as source of good, not of harm.² It was well to have the crow fly from north to south across one's path; and the immense change wrought in folk-lore by theological influence is proved when we compare this good omen of old with the modern belief: "Schreien zwei *nordenher* kommende Krähen uns nach, wenn wir von einem Begräbniss heimkehren, so kündet's eignes Leid vor Jahresende."³ Again, not only gods but good men—as compared with the evil races noted above—dwelt for ancient belief in the north and the west. Far to the north were the blameless and joyful Hyperboreans; westward lay the Fortunate Islands and the land of the happy dead. In modern folk-lore even the north wind is often a good-natured giant, who eats what you leave out for him and brings treasure in its stead.

The south wind, on the other hand, does not always bring "love, sunshine and desire." What made the world shall unmake it. The Germans had always believed in the destruction of the world by fire.⁴ Surtr shall rush from the south, and the universe dissolve in flame. In ordinary affairs as well, the south wind can be noxious. For Shakspeare⁵ it is the "foggy south," and "foretells a tempest and a blustering day." "Southerly winds were generally supposed to be bearers of noxious fogs and vapors." "A southwest wind blow on ye, and blister you all o'er."⁶

Strong winds are sometimes represented as *black men*: for instance, the Föhn, the south wind.⁷ "Noch heute wüten

¹ Vernon Lee, "Euphorion," I, 119, points out the oppressive insistence upon spring which fills medieval poetry. "Of autumn . . . of the standing corn, the ripening fruit of summer, . . . the Middle Ages seem to know nothing."

² Grimm, "Gesch. d. deutsch. Sprache," 681 ff, gives a number of references.

³ Rochholz, "Deutscher Glaube u. Brauch im Spiegel d. heidnischen Vorzeit," I, 156.

⁴ Of course, Bang and Bugge here claim Christian influence.

⁵ Dyer, op. cit., 94 f.

⁶ Temp., I, 2.

⁷ E. H. Meyer, Indoger. Mythen, II, 455. Cf. Simrock, "Mythologie," p. 58. Cf. also the five bad principles among the Manichees—Mist, Heat, Vapor, Sirocco, Darkness.

oft am Bosphorus der sogen. schwarze und weisse Orkan gegen einander."

So much for the points of the compass. It remains to be said that "black" and "north," "white" and "south," do not always go together. Snow often suggests a different association. Grimm notes a case¹ where black on certain burnt bones means a mild, open winter; white, a great deal of snow. On the next page, another but similar test makes red indicate a hard winter and white a mild one. In the mythology of Yucatan, "as in Oriental symbolism, . . . each quarter of the compass was distinguished by a color—the east by yellow, the south by red, the west by black, and the north by white."² *Die wizen wege* could easily have another symbolism than that of Grimm's poet.³

Continuing our parallel, we find indeed that sickness and death are in line with darkness and winter, as opposed to light, summer, health and life itself; but the color-symbolism, white for "heil" and black for "unheil," is not so natural to the matter as might be supposed. White, that cheery color, the hue of "all pleasant and elevating emotions," which gave the Quiché tongue words for "east, dawn, morning, light, bright, glorious, happy, noble,"⁴ has in our folk-lore many associations with disease and death.

For the notion "to be born" Bode⁵ gives three A.S. kennings: *wacan*, *onwacan*, *āwacan*—all with the idea of waking. In my "A.S. Metaphor,"⁶ I have compared with this the act of creation—as in "*wif āweahte*" (G. 174.) Similarly, death, though many kennings for it are in terms of a journey, a going away, is often expressed as falling asleep. To kill is *swebban*, "to put to sleep." Another kenning for "die" is *céas him*

¹ D. M. ⁴, 932.

² Brinton, "Myths of New World."

³ Of course, no account can be taken here of all the summer myths—the beneficent spring-god warring against the destructive powers of darkness and cold—any more than of the fundamental myth of the battle of light and darkness.

⁴ Brinton, op. cit., p. 175.

⁵ "Kenningar in der Ags. Dichtung," p. 38.

⁶ P. 27.

óþer léoh̄t (Edg. 22):¹ cf. *oð þæt eal scæceð, léoh̄t and lif somod* (Widsið 141 f.). The metaphor of light for life is universal. "Saturnus cwæð: Niht bið wedera þéostrost, nýd bið wyrda heardost, sorh bið swærost byrþen, slæp bið déaþe gelicost."² The Russians call this "the white world," as distinguished from the shadowy realm.³ Life is blown out like a torch, or a taper, extinguished like a brand.⁴ A Scandinavian hero-song says: "I will blow out the light of thy life;" and John Ford sings ("The Broken Heart"):

"Oh, no more, no more, too late
Sighs are spent; the burning tapers
Of a life as chaste as fate,
Pure as are unwritten papers,
Are burnt out: no heat, no light
Now remains; 'tis ever night."

In short, the parallel of light, health, life and darkness, sickness, death, fails to divide the symbolic colors, black and white, as we should expect. Black is the badge of death, but not in the old Germanic traditions. For our ancestors there was no "pallida" or "atra mors."⁵ The Greeks made death a sort of genius, not at all repulsive, who summoned the soul: death was the brother of sleep.⁶ In the Middle Ages we adopted the skeleton and the details of individuality. Mostly death is black, when a definite color is possible; but often he is clad in gray. Black is now his symbolic color. In an old engraving, Death and the Emperor play at chess; Death's pieces are

¹ This figure looks almost clerical. Cf. Vigfusson—Powell C. P. B. II, 285, Einar's verse on the Passion: it was dark then "that we might gain another light." Cf. Héliand "*gód lioh̄t mid gode*, and Vilmar, op. cit., p. 42.

² "Sal-Sat," p. 162 f.

³ Tylor, "Prim. Cult." II, 79.

⁴ Grimm, D. M.⁴, 711. The stock illustrations are the classic Meleager and the Norse Norna Gestr. (Müller, "Sagabibliothek," II, 112 f.). Wordsworth ("Excursion," "The good die first," etc.) and Shakspere (Oth. V, II) have added to our familiarity with the figure. Rochholz, "Lebenslicht and Sterbekerze," "D. G.," etc., I, 165 ff., collects material from folk-lore. Familiar is the märchen of "Gevatter Tod," in Grimm, K. und H. Märchen, No. 44.

⁵ D. M.⁴, 708.

⁶ For details cf. J. E. Wessely, "Die Gestalt des Todes u. des Teufels in d. darstellenden Kunst," Leipzig, 1876.

black, and the Emperor is checkmated.¹ In a death-dance in Kloster Klingenthal in Klein-Basel, a child carried off by death cries out:

O wê, liebe muoter mîn,
Ein schwarzer man zieht mich da hin.²

A dreamer in Iceland (1209) sees death as a black and hideous man.³ But the older garb seems to be gray, and here the hideousness is softened down—it is “Gossip Death,” *Gevatter Tod*, of the *märchen*. It is well known that the popular figure of the devil took the same course. At first the devil is not personally represented in Christian art.⁴ He is the snake, as in Genesis. Soon, however, he is represented as a huge Negro or Moor; and in the familiar English phrase is a “collier” or the like.⁵ In a Paris MS. of the ninth century, the devil is in human form, but clad in gray. Old miniatures often show the devil in gray; later the black predominates, and he appears, too, as raven, ape, goat, dog, cat, fly, toad, etc.⁶ Dirt became a characteristic of his abode; and one thinks of Norse Geirröðr and his foul home. The devil does not allow his subjects to wash themselves. A boy served him seven years and became quite black; when the time was up, the devil washed the youngster white again and sent him home.⁷ Especially is the blackness of the devil insisted on. Of many illustrations, cf. this from “Salomon and Saturn”: “Ac hû maniges bléos biþ þæt déoful and se Pater Noster þonne hie betwih him gewinnaþ?”—and one of the answers runs:

“Fiftan siþe biþ þæt déofol on þéstre onlicnesse;
Sixtan siþe biþ se Pater Noster on leohte onlicnesse.”

¹ Wessely, p. 30.

² *Ibid*, p. 42.—Where does Swinburne, in his “Rondel,” get the phrase “White Death?”

³ Vigfusson—Powell, “Corp. Poet. Bor.,” I, 360.

⁴ Piper, “Mythologie u. Symbolik d. christlichen Kunst,” 1847–51, I, 120.

⁵ References given by Grimm, D. M.⁴, 830, III, 294.—Cf. Sir Toby’s “Hang him, foul collier,” “Twelfth Night,” III, 4.

⁶ Menzel, “Chr. Symb.,” II, 466.

⁷ Müllenhoff, *Sagen*, 592. Cf. “Der russige Bruder des Teufels” in Grimm’s *Märchen*.

Artists of the M. A. painted the devil black, often also in dull red, suggestive of flame; now and then in all colors—notably green (Wessely, 91). Green is a favorite color in the testimony about the devil found in the Trials for Witchcraft. But these rules are mainly for sacred art and what it has influenced.¹ For popular tradition white has as much to do with disease and death as black has; and when the devil is represented by other uncanny apparitions, white is as often the badge as black. White is frequently the color of mourning. Rochholz, in the work already quoted, has a chapter on “Die Leidfarbe Weiss,” in which he collects ample material to prove the connection of the color white with notions of death and disease.² It is sign of death when one has white spots on one’s nails; and white on certain plants and animals is of evil omen. The first white butterfly one sees in spring means trouble. The hunter who sees a white chamois is in danger. To dream of white mice, white linen—of course, the shroud is suggested—betokens death. Chief mourners at funerals (in parts of Switzerland³) are clad in white. So far the cases gathered by Rochholz.⁴ Further, farmers say (North Germany) that no calf will live which has a white mouth.⁵ The white spots on the nails, mentioned above, are called “Norse-tracks” on the Faroe Islands.⁶ A white rose or a white lily is a sign of coming death.⁷ White sparrows or finches mean in Bohemia the approach of hard times.⁸ To find a white bean in the garden

¹ The Oriental tradition gave black as devil-color. The Persians “lernten das Urbbevölkerungselement noch kennen [in their original conquests] und ihr Widersacher—der Teufel—färbte sich ihnen darum schwarz.” Lippert, *op. cit.*, I, 10. The Light-Cult was perhaps helped by their physical dualism. The same may be said of Hindu traditions. The scene of Indra’s battles, says E. H. Meyer, “Indogerm. Mythen,” II. 614, was “im Osten, den die von den Ariern beföhdeten Ureinwohner, die auch den Dämonennamen Dasyus führten, . . . inne hatten.”

² Cf. also Wuttke, “Abergl.,” p. 193.

³ A friend from Hanover tells me this is also a custom there.

⁴ I. 134, 136, 139 f.

⁵ Kuhn—Schw. Nd. Sag., p. 447.

⁶ Wuttke, “Abergl.,” 32.

⁷ Grimm, D. S., 264, 265.

⁸ Wuttke, Abergl., 191.

denotes an early death in the family.¹ Going further afield, we know that the Egyptians affected white as the color of their dead;² and parallel customs could be collected in abundance. Yet there is confusion. The other symbolism of white, the cheery omen of the "*wizen wege*," makes itself felt; and it would be useless to collect instances of black as color of death and mourning. Confusion, for example, prevails in the case of the white butterfly, which, as we saw, in Bohemia betokens death, yet in Bavaria means luck in money-matters.³ If you want luck in a lottery, says another superstition, catch a white butterfly, add the number of its spots to the day of the month, and that will be the fortunate number.⁴ Spots on the nails in another part of Germany mean good luck, gifts and the like;⁵ and some such belief obtains here in America.

Very well marked is the association of white with personifications of disease, especially of the pestilence. A little white manikin once prophesied a famine and announced to wicked people their speedy death;⁶ and as late as 1850 the cholera was predicted by a mysterious white-clad woman.⁷ It is, to be sure, a tall woman robed in white whom men call the Corn-Goddess, and who brings good things. But just such a white-clad figure is the pestilence which walks abroad at noon-tide (this disease is often called *morbus meridianus*) as in the 91st Psalm, and goes striding through the fields, a sickle in her hand.⁸ This is among the Wends. For the Servians, pestilence is a woman with long white veil.⁹ In Norway she is an "old, pale woman," but sometimes clad in red; in Brittany she is robed in white and walks with a staff; so, too, in Lithuania and Russia.¹⁰ How closely black and white often

¹ Pröhle, Z. f. d. M., I, 199.

² Portal, op. cit., 45 f.

³ Z. f. d. M., III, 175.

⁴ Wuttke, Aberggl., 192.

⁵ Kuhn—Schw. Nd. S., p. 459.

⁶ Grimm, D. S., No. 235.

⁷ Schambach—Müller, Ns. Sag., 239, 241.

⁸ Haberland, Z. f. Völkerpsych., etc., XIII, 318.

⁹ Grimm, Gramm., III, 334.

¹⁰ Grimm, D.M. 4 991 ff.

come in touch, is shown by Danish traditions of the Black Death. This pestilence, "*der ogsaa lod sig see i Skikkelse af en hvid Hest*," is announced by a "*meget deiligt Barn klædt i hvid Skiorte*."¹ When the pest attacked a certain German village, there was seen in the first house where it broke out, "*nachts ein weisses Fräuli mit einem weissen Besen emsig die Thürschwelle kehrend, worauf ein weisslicher Rauch aufstieg*."² The famous "*weisse Frauen*" are now and then connected with pestilence. On the other hand, the "*Viehshelm*" of Tyrol, who brings a similar disease to cattle, appears as a black man or as a black bull; while the human pestilence was often referred to black clouds.³ It appears as a black cloud, as a "*schwarz Ding*."⁴ It may be brought by a black man.⁵ In the time of Justinian the plague was brought to the land by headless black men who came in brazen barks.⁶ Mist may well have suggested or emphasized those trailing garments of pestilence; for fog and vapor that rose from the fens were justly feared, and the color could easily vary from white to black, the "*maiden*" or the "*dragon*" of myth.⁷ Grimm sees rather in these white-robed women of stern look and more than human stature the representations of older goddesses, who were once feared and worshipped for their deadly power.⁸ Again, the pestilence appears as a blue flamelet,⁹ a ghostly sign on all occasions.¹⁰ Disease was thought to be caused by something like a worm or an insect in the afflicted part—cf. "*ringworm*"—and the color of it was often white; in one case these worms are respectfully called "*the white people*."¹¹ A severe headache may be

¹ The reason for the name Black Death was a little black dot inside one's hand.—Thiele, *Dan. Folkesagn*, II, 58, 63.

² Henne am Rhy, "*Deutsche Volkssage*," 259, and Laistner, "*Nebelsagen*," 88

³ Cf. Müllenhoff, *Sagen*, 329.

⁴ *D. M.*⁴, III, 347.

⁵ Grimm, *D. S.*, No. 168.

⁶ Tylor, "*Prim. Cult*" I, 295.

⁷ Laistner, *op. cit.*, p. 80.

⁸ *D. M.*⁴, 995.

⁹ *Z f. d. M.*, I, 191, *Rochholz*, I, 159.

¹⁰ As in *R.* III, V. 3.

¹¹ Mannhardt, "*Baumkultus*," p. 78.

caused by the 'schwarzen Elben;' but the white ones are bad enough, and, like the other, rob one of memory.¹ In Sanskrit tradition it is a huge butterfly with white wings which gives one headache. I am indebted to the kindness of Dr. D. G. Brinton for the following references: "The Australians paint themselves white as a sign of mourning for the dead (Baker, Sydney and Melbourne, p. 150.) The Omahan Indians use white for the same purpose (James, Exped. to the Rocky Mts., I, 282). The Nahuas of Mexico considered a white (albino) child an evil omen and were accustomed to kill it (Motolinia Historia). The natives of Terra del Fuego use white as the color signifying hostility and war, red as that for peace and friendship² (Voyage of the Beagle, II, 177). The Yebus in Africa also use white as the war-color (Mem. de la Soc. Ethnol., II, 70)."

Before passing to the consideration of white or black as expressing the notions of *Heil* or *Unheil* when found in animals or other objects, we may pause a moment to inquire into popular ideas about color or complexion of the human face. Ethnologists agree that the "white races" have been conquerors in the struggle for existence and are "habitually the dominant races."³ Add to this fact that these dominant races belong, relatively speaking, to the north, and the conquered negro to the tropics; that the black race, owing to their color itself—or the cause of it, "die Menge der dunklen Pigmentkörnchen . . . welche in der Schleimschicht der Haut verbreitet sind"⁴—can defy and escape fevers which are fatal to the white man; and we understand, first, the despised position of the color in general, and, secondly, its connection with the uncanny and the evil. Whether Surtr himself is to be referred in any remote way to this ethnological and climatic origin, might be a question; but there is no question that for most Aryan races black has been a despised color. That the negroes themselves share this view is a melancholy proof of

¹ Kuhn, in his *Zst.*, XIII, p. 70f.

² Cf. Rochholz on red as German "*Hausfarbe*," op. cit., II, 191 ff.

³ Spencer, *Sociology*, p. 25.

⁴ Lippert, *Culturgesch.*, I, 11.

their imitative character; Tylor¹ reminds us that even an African negro's notion of heaven is that he shall there *turn white*—surely a result of theological influence. At any rate, it makes a pendant to the Jewish tradition that Ham during his stay in the ark changed from white to black because of his unchastity; or that the raven himself, once white, grew dark of color, “weil er sich in der Arche Noä paarte.”² Another exquisite but less serious reason for the raven's color is found in the dialogue of Salomon and Saturn: “for hwām sī se hrefn swá sweart þe ær wæs hwīt? . . . for þy þe he eft ne hwirfde to Noe in to þære arce, þe he ær of gesend wæs.” All these transformations are in line with Lucifer's: him God “hæfde . . . swá hwītne geworhtne,”³ but in sin and rebellion he turned black; the *leohtberende* became *se swearta gæst*. A picture in the Cædmon MSS.,⁴ described by Bouterwek, shows *helle mupa*, in which there projects one *huge black tooth*. To this Satan is bound. He has just fallen from heaven; half of his body, already in the flames, is burnt black; the other half, as yet untouched, is of the white angelic hue. All legends of things which turn black from the touch of demonic powers, or from sympathy with them, follow this notion. A man, killed in battle with a demon, is picked up “black as hell.”⁵ A butcher ate some sausage on Good Friday, and fell dead with his body “raven-black.”⁶ A *ghost* touched a girl's breast; it turned black, and she died in three days.⁷ Give your hand to a ghost, it turns black and drops off.⁸ A piece of bread given by the “unterirdischen” was found next morning black as a coal.⁹ A piece of bread is given to a man in the under world, but he refuses to eat it. He throws it against a post; next morning the post is coal-black.¹⁰

¹ “Primitive Culture,” I, 379.

² Menzel, Christ. Symb., II, 133, 253.

³ Gen., 254.

⁴ Cædmon, p. CL.

⁵ Maurer, “Bekehrung d. norweg. Stämme,” II, 85.

⁶ Tyrol: Z. f. d. M., II, 56.

⁷ Grimm, “Deutsche Sagen,” No. 286.

⁸ Schambach-Müller, Ns. S., 380.

⁹ Müllenhoff, No. 409.

¹⁰ Schamb.-Müll., 382.

Two Danish "Kæmper" hurl huge stones at each other; these fall into the sea and are now rocks, one called *Sortensten*, the other *Blak*.¹ All this is plain enough. But to show how little the popular mind understood the full extent of the dualism, and how much it inclined to put all supernatural persons in one category, we may take the explanation made by a skipper in regard to the *black spot* on the back of the shell-fish; this was where . . . Satan?—not at all, but—*St. Peter* grasped it at the time of the miraculous draught.² It should have been a white mark, by the card of color-symbolism. Much the same story is told in Scotland of the haddock.

It is hard to say where this theological odium about black color can be sundered from the prejudice of race. Near Nismes, in France, Catholics call a Protestant *gorgeo nigro*, "black-throat."³ That is, perhaps, theological. The dark grain of the Indian millet (*sorgum vulgare*) made it undesirable in European eyes, and gave it contemptuous names like *G. Mohrhirse*, *Negerkorn*.⁴ That is the race-touch. Mannhardt tells⁵ of negroes in Gambia who believe in a superior race of *white forest-spirits* and offer a *white chicken* to them. This is in line with the negro-heaven mentioned by Tylor. But there is another side. I am again indebted to Dr. Brinton for a reference to Bondyck, "*Voy. à la Côte de Guinée*, p. 179, where we are told that most tribes on the Gold Coast believe that the good God is black, the evil God white.⁶ Here, too, may be mentioned the black divinities of classic mythology, as well as the black images of the Virgin, found in some Catholic countries; the reason is not clear, but race may have something to do with it. Thus St. Mauritius of the famous "Thundering Legion" is represented as handsome but black.⁷ Here, too, belongs the "*nigra sum sed formosa*" of the Song of

¹ Thiele, "Danmarks Folkesagn," II, 45.

² Kuhn-Schw., Nd. S., 302.

³ Tylor, Prim. Cult., I, 388.

⁴ Hehn, op. cit., p. 414.

⁵ Baumkultus, p. 148.

⁶ Cf. also Grimm, D. M.,⁴ III, 294.

⁷ Menzel, op. cit., II, 17.

Solomon.¹ One of the Three Kings is always black; so is often Mary of Egypt, as well as Agrippina the Sibyl—"black but majestic."² Moreover, "l'ecole Byzantine du douzième siècle donne souvent à Marie un visage noir."³ At Chartres, Beaune and Dijon, there were black images of the Virgin; also in Loretto, Naples, Würzburg (where the race-test fails utterly), and other places. Grimm compares⁴ these images with the dark goddesses of ancient classic art—Demeter, Aphrodite, Diana. Kuhn explains⁵ the black Demeter as "die finstere Wetterwolke." Isis of Egypt was represented as black. "Bei den Römern hiess Pluto *Jupiter Niger*, der schwarze Gott."⁶ But these were exceptions. Like medieval painters, the ancients held gold to be the supreme color, the badge of deity. Their gods were represented with golden hair. Eros was white, with golden hair; Anteros had hair mingled "de noir et d'un roux ardent."⁷ Balder, the ideal god of Scandinavia, had the fairest of faces;⁸ and in Christian times "Hvíta-Kristr" was a universal phrase. The popular images of the Virgin have blonde hair.⁹ Gold and white go together. The water of the Norns' well made white whatever it touched; in later märchen such wells turn things to gold. Yggdrasill is "*ausinn hvíta auri*."¹⁰

This fairness of Scandinavian gods was handed down to mortals,—so ran the legend. Heimdall, *hvítastr Asa*, under the name Rigr, begets the ancestors of three castes—jarl, karl, thrall.¹¹ Thrall, the slave (remnant of a conquered dark race), is black. Karl, the freeman, is ruddy. Jarl, noble and warrior, is white, with yellow hair. The Old Norse lady is called

¹ Chap. I, v. 4.

² Menzel, II, 133, 366.

³ Auber, op. cit., I, 300 f.

⁴ D. M., ⁴ 260 note.

⁵ Z. f. d. M., III, 373.

⁶ D. M., ⁴ 830 note.

⁷ Auber, I, 339.

⁸ Gylfaginning, 22.

⁹ Wutke, Aberg., 27.

¹⁰ Völuspá (Hildebrand, Edda)—Stanza 23.

¹¹ Rígs-mál, Vigf.—Powell, C. P. B. I, 234 ff.

"linen-white," "swan-white," "snow-white;" we even hear of the white neck of Wayland—*hvítan hals Völundar*.¹ What reader of our own ballads does not recall the invariable fair skin and golden hair of knight as well as lady? Proud Lady Margaret "kaimin her yellow hair;" the milk-white body of Child Waters; the yellow hair of young Bekie (Beichan) which "the mice but an the bold rottens" were nigh to eat; fair Polly (= Lady Isabel), and her mysterious dread of the nettle, "for fear it should tangle my golden locks, or freckle my milk-white skin,"—are types that constantly recur.² In "The Twa Sisters," the fair younger daughter, who gars the older gae maiden for evermair, has in version A cherry cheeks an yallow hair; but in D the yellow locks hang over "coal-black eyes."³ Professor Child remarks that in the Norse versions of this ballad "the younger sister is fair and the older dark," in order to emphasize the excellent differences of the former. Two English versions have respectively: "Ye was fair and I was din (dun)," "and the old was black and the young ane fair."⁴ But the moral distinction carried over to color is a late touch; it was that Jarl-type of the *Rîgsmål* which made the standard. In "Lord Thomas and Fair Annet," the nut-browne bride and her cattle are weighed against fair Annet and her blonde beauty, and version C speaks of the handkerchy that hideth the former's "din hide."⁵ White, red and yellow are the favorite ballad colors. Black is a sign of low birth. Horn "blackens his skin" in order to disguise himself; and in the ballad he asks the old beggar-man, with whom he exchanges clothes:

"Will you lend me your wig o' hair
To cover mine because it is fair?"

When King Orfeo asks for his wife, the king of fairy-land thinks the harper is not fit to have her,—he is "lean and rough and black."⁶ This is a Germanic trait. An actual descrip-

¹ *Volundarkv*, 2.

² Child, *Ballads*,² II, 431; III, 87; II, 466; I, 60.

³ *Ibid.*, II, 127, 129.

⁴ *Ibid.*, I, 120.

⁵ *Ibid.*, III, 182, 186.

⁶ *Ibid.*, I, 189, 202, 217.

tion of the West Goth, Theodoric, dwells upon his milk-white complexion flushed with manly red.¹ White objects, too, shared in this aristocratic preference. At the old German banquet, wooden beakers were often used, and the *best were white*; in the Weistümer, says Grimm, mention is often made of this: "dem richter wird der höchste stul, die schönste schüssel und der weisseste becher zugesprochen."² So, too, the warrior's shield is white. Odin is described by Saxo Grammaticus with a "*clypeo albo*." In the Volsungasaga, Sinfjötli's corslet is "white as snow." Gunnarr boasts that his helm and shield are the whitest of all—"hiálm ok skiold hvítastan."³ Cf. "Béowulf," 1448: *ac se hwíta hehm hafelan werede*; "Exodus," 301: *hwíte linde*; "Hildebrandslied," 66: "huitte scilti." Tacitus tells us, however, that the old Germanic shields were marked "*lectissimis coloribus*;" and he mentions the "*nigra scuta*" of the Harii, which were meant to inspire the enemy with terror.⁴

This feeling that a dark complexion is the badge of low or foreign birth lingers a long time in our own traditions. The sonnets in which Shakspeare seems to apologize for his bad taste in loving the "dark lady,"—the "woman colour'd ill," with "mourning eyes," which held him in thrall despite his "five wits" and "five senses,"⁵ are familiar enough; so is the passage in "As You Like It," where Rosalind rails at Phœbe for her "inky brows" and "black silk hair." Less familiar is the notion that fair people bring good luck and dark ones ill; that the first caller on New Year's morning must be of fair complexion.⁶ But our blonde Germanic ancestor⁷ has yielded

¹ Rochholz, II, 222. Gold and black were opposed in theological tradition. Thus "Sal. and Sat.," p. 175, we are told that two spirits wait on man: "öðer bið golde glædra, öðer bið grundum sweartra"—blacker than the abyss.

² "Ueber Schenken u. Geben," Kl. Schr. II, 183.

³ "Atlakv.," 7.

⁴ "Germ.," VI, XLIII.

⁵ Cf. Sonnets 127, 130, 131, 132, 137, 141, 147, 150, 152.

⁶ Book of Days, I, 29. But cf. Grimm D. M.,⁴ III, 323.

⁷ Best preserved in some parts of Scandinavia and in Saxony, where one can still find the "*weisse Mädchen, schwarzes Brod*," as Hehn puts it. Statistics are given by Andree, Zst. für Ethnol., 1878, p. 343. Out of 468,763 school children, 317,444 were blonde, 136,014 were brown.

to constant crossings with the Celt; and he in his day mixed freely with the dark-haired, black-eyed, and brown-complexioned races of early Britain.¹ The blonde type is disappearing: of actual white races, asks Victor Hehn,² "siegt nicht stets der dunkelhaarige über den blonden?" He reminds us that Goethe, the best type of German, was no blonde, and that Goethe's Dorothea had black eyes. Richard Andree³ shows that the majority of Indo-Europeans to-day have dark complexion. How different from the old German or Scandinavian! The Anglo-Saxon conquerors of Britain speak in contempt of the "swart Welshmen." In the Riddles (13, 4) *swearte Wealas* appear as captives, and are expressly compared with "worthier men;" in 53, 6 a *wonfáh Wale* draws water, or 13, 8 the *wonfeax Wale* makes harsh contrast with her fair-haired haughty mistress, as in 43. So too in Scandinavia, black hair was a blemish.⁴ Cormac, the Icelandic, had but one defect—black hair. Sighvat, another, "was dark-haired and dark-eyed, . . . but he could sing" as well as any. "I have a blemish in my speech, and black hair," says a third.⁵ Gunnlaug Snake-tongue mocks: hann's illr ok svartr.⁶ Later, the brown seemed an ideal for Englishmen; but black still savored of foreign treachery: "to the blak draw thy knyf, with the brown lead thy life."⁷ Then the white itself comes into evil report: "the whyth ys full of cowardys, the red full of felounis"—abnormal types. Judas Iscariot was painted with red hair and beard, and from about the year 1000 proverbs spring up uncomplimentary to the red-haired man.⁸ "Hüt dich vor schwartz und rot Bart."⁸ The race-prejudice comes out in a proverb quoted by Uhland: "Beware of a black German, a white Italian, a red Spaniard and a Hollander of any color." Good old Thor had a red

¹ Grant Allen, *Anglo-Saxon Britain*, p. 56.

² *Op. cit.*, 430-432.

³ "Rothe Haare," *Zst. für Ethnol.*, 1878, 335 ff.

⁴ Cf. Tylor "P. C." 1, 389.

⁵ Vigfusson-Powell, *C. P. P. B.*, II, 32, 64, 119, 127, 130, 176.

⁶ *Ed. Mogk*, p. 10.

⁷ *Ms. Harl.*, 3362, Kemble, *S. and S.*, p. 25.

⁸ Andree, *op. cit.*; Rochholz, *op. cit.*, II, 222 f. Uhland, *Kl. Schr.*, IV, 45.

beard, and Wuttke thinks this caused the Christian prejudice.¹ But however that may be, one thing is sure: the prejudice rests on no moral basis, on no inherent dualism. No dualism of *heil* and *unheil* is needed for the *swearte Wealas*. When we come to dark races we find other views. The Semitic ideal of beauty was dark,² with curly and raven locks. An Arabian proverb says "ruddy of moustachio, blue of eye and black of heart," or else "blue of eye and foul of face."³ Says Robert Burton in his "Anatomy of Melancholy," III, 2: "Homer uses that epithet of ox-eyed in describing Juno, because a round black eye is the best . . . and furthest from black the worst; which Polydore Virgil taxeth in our nation . . . we have grey eyes for the most part . . . they be childish eyes, dull and heavy. Many commend on the other side Spanish ladies and those Greek dames . . . for the blackness of their eyes."

So much for the personal side. We turn now to the supernatural world of ghosts, and to the folk-lore of animals and common things.

For the matter of ghosts, and whatsoever uncanny things haunt the night, both colors, white and black, are equally in vogue. Whatever white may signify in its proper sphere of daylight, seen at night it is not of cheerful omen. Woden rode a white horse, and so does his successor, the Wild Huntsman, as countless stories tell; but in the train of the latter run—especially in Danish legends—a pack of coal-black dogs. On the other hand, a king who represents the Wild Hunter is "all black as coal," while his dogs are entirely white.⁴ So it goes through a host of legends. A "white" hunter on nearer view shows his true character by "vanishing in a black vapor;"⁵ and once the devil appears as an actual "Schimmel;" but a white rider (king) on a white horse will bring back good tidings.⁶ Two templars ride after death, one on a white horse,

¹ We meet red in a number of uncanny people,—the nickelmann, the troll, and so on. Cf. Rochholz, II, 236.

² Andree, p. 339.

³ Sir R. Burton's trans. Thousand N. and N., 4, 192 and note.

⁴ Müllenhoff, Sagen, etc., 487, 488.

⁵ Lai-tner, Nebelsagen, 125.

⁶ Müllenhoff, 507, 577.

one on a coal-black steed.¹ Sheeted ghosts abound, but many a one appears as some black animal, just as the devil himself is a black "poodle," or black fellow; a suicide starts as a black man from behind the tree where he hanged himself.² The office of the famous White Dame of the Hohenzollerns in Berlin is performed for Bavarian royalties by a Black Lady. An amusing milliner-märchen is that of the White Dame who wears *black gloves* "for grief in princely houses."³ Near the scene of a murder one sees now a pair of black men, now a white "Ziegenbock."⁴ Not at all as sheeted ghost does St. Nicholas go his rounds "clad in a white mantle," and bestowing his gifts;⁵ while the famous "*Schwarze Greet*" in her black dress and on her white horse, scaring, haunting, but often "bringing good luck," is enough to confuse any attempt to establish the color-dualism. Another of the same neighborhood (Schleswig-Holstein), "*die witte Dorte*," appeared on the tower of her castle clad in white whenever an unusual event—good or bad—was about to happen.⁶ A white-clad woman, "*die heilige Walpurga*," with fiery shoes and crown of gold, is chased by bad spirits on white horses;⁷ holy and unholy have the same color. In Oberpfalz "*die armen Seelen*" are "little black fish;"⁸ but we often meet them enchanted in white shapes. Women who have died in childbirth haunt the house as often in black as in white, and with no difference of character or circumstance.⁹ Witches love black animals, but we meet a witch as a white cat, white dog,¹⁰ and many similar forms. When a man is drowned at sea, a black monster climbs out of the waves; but we find three witches who as "huge white billows" try to engulf their sailor-husbands.¹¹

¹ Z. f. d. M., II, 415.

² Mannhardt, "Baumkultus," 42.

³ Wuttke, Aberglaube, 30. Cf. also Grimm, "Deutsche Sagen," No. 263.

⁴ Kuhn-Schwartz, Nordd. Sag., p. 86.

⁵ Wuttke, 19.

⁶ Müllenhoff, 459, 460.

⁷ Mannhardt, Baumk., 121.

⁸ Wuttke, 449.

⁹ Thiele, "Danmarks Folkesagn," II, 136.

¹⁰ Müllenhoff, 313, 314.

¹¹ Ibid., 337, 307.

Ghostly toilets are often more elaborate. Princess Ilse arrays herself tastefully in "long white robes" and a "broad black hat."¹ More gorgeous in the Klabatermann. A Hamburg skipper says it is a little fellow with yellow knee-breeches, cavalry-boots, huge fire-red head, white beard, green teeth and a pointed hat. You can mostly find him on shipboard under the windlass.² Or take the Kornweib: she has red eyes and a black nose, wears a white hood, and has a white sheet bound about her. Moreover in this same person's bailiwick there roam a great bear, an ox, a huge black calf, a white pig, an ass with a gray shape on its back, a coal-black horse, a white schimmel, and an ashen-gray horseman who cries "Let the dead rest!"³

The white women, "weisse Frauen," are familiar objects in German folk-lore. An elaborate attempt to explain them by mythological comparison has been made by Kuhn.⁴ Whatever their origin, meteoric or not, we are interested in their color. It has no moral signification. Often we find "white dames" by some healing spring, along with the white snake,⁵ dispensing health; and, again, we find them bad and harmful.⁶ Moreover, they turn from white to black, from black to white; where Kuhn's explanation of the storm-cloud⁷ seems plausible enough. They can kill with their kiss.⁸ In Tyrol, Frau Perth, die weisse Frau, holds out to the night-wanderer a black cloth: if he takes it, he dies.⁹ In one case the "Percht-Frau," on a harrow decked with sacred herbs, holding a flax-winnower in her hand, is *drawn by a black horse*.¹⁰ This, moreover, is in daylight. Mostly the white dame is actually white, hangs out her white linen, guards her

¹ Kuhn-Schw. Nd. S., p. 177.

² Ibid., p. 423.

³ Schambach-Müller, Niedersächs. Sagen, pp. 76, 196, 300.

⁴ Zst. für deutsche Mythologie III, 368-392: "die Sage von der Weissen Frau."

⁵ D. M.⁴, 488, 962.

⁶ Müllenhoff, 380.

⁷ Z. f. d. M., III, p. 382.

⁸ Z. f. d. M., II, 97.

⁹ Ibid., III, 206.

¹⁰ Dahn, Bausteine, 1, 237.

treasure, and waits for release from her enchantment; but under precisely the same circumstances we now and then find her black,¹ sometimes half white and half black,² like the Scandinavian Hel. There is a game in Switzerland, "Wo hocket die Frau Rose."—"Obe dra."—"Was het sie a?"—"Wiss und Schwarz."³—Mannhardt attempts to explain the change of color.⁴ The fair Germanic goddess with dazzling white hue and golden hair was slandered by theological persecution into a black and ugly thing, or else a mere illusion of beauty. So Frau Hulla was said to be in front beautiful and white, but seen from behind, "schwarz-blau."⁵

Grimm denied that our old heathendom knew any dualistic opposition of good powers and bad. In the case of the white and black elves, however, he seems to recognize a sort of dualism,⁶—they are "untergeordnete götter." That the dualism has little depth and tends constantly to deny itself is clear from Grimm's words (p. 370) and from the examples which could be collected in folk-lore. The black elves are often "gutmütige Wesen."⁷ Judging, moreover, from the *Völuspá*, and the many traces⁸ of Christian influence in Norse poetry and tradition, we may assume that theological lore has helped this color-dualism among the elves of Scandinavian myth. It is a question how far theology has caused the notion that supernatural persons turn dark after intercourse with mortals. Is it that they reveal

¹ Kuhn-Schw., Nd. S., 23.

² Wutke, Aberglaube, 29; also in many legends. Sometimes this particolored person is almost a spirit of health, sometimes she is lost.

³ Mannhardt, Germ. Mythen, p. 275.

⁴ Ibid., 257.

⁵ Cf. the story of Frau Welt, Scherer, G. D. Lit., p. 79 f. Grimm D. M.,⁴ 371 note.³

⁶ D. M.⁴ 368 370. Cf., also Wolf, Beiträge zur deutschen Mythol. II, 228 ff. He thinks this color-distinction rests on "uralte Grundlage."

⁷ On the island of Rügen there are four kinds of "unnerirdschen;" of these not the black, but the green are most dangerous.—Zst. f. d. Myth. II, 142.

⁸ One does not need to accept outright the argument or conclusion of Bugge's "Studier over de nordiske Gude-og Heltesagns Oprindelse," nor yet to deny the force of Müllenhoff's answer ("Deutsche Alterthumskunde," V. I, 1 ff.), while holding fast to the belief that a large amount of Christian teaching has mingled with Norse Mythology.

their true nature, just as the devil mentioned above was white at first but disappears in a black cloud; or is it a wider and older notion of the loss of celestial brightness through contact with earth? In medieval legends this is a characteristic of the elves; after meeting a mortal lover, they turn from the "fay-creste of alle" to a black, horrible and decrepit thing. . . .

And alle hir cloþynge was awaye,
That he byfore sawe in þat stede.
Hir a schanke blake, þat oþer graye,
And al hir body lyke þe lede.¹

But in another MS. of the ballad there is a passage where the elfin lady assures Thomas "fende of hell am I none," for all she looks so "grym and so stowte." Elfland is not hell, but "an island with lordly gardens;" writers of the twelfth century speak of the elfin folk attending mass.² Moreover, the change is often reversed; everybody is familiar with the legend which Chaucer has embodied in the Wife of Bath's Tale, where mortal favor transforms a hag into the fairest of women.³ In the *Sorla þáttr*, quoted by Bugge,⁴ Heðinn sees the goddess (in Saxo, a Valkyria) who came to him fair and beautiful, and gave him a magic drink, disappear "stor og mörk." Freya was sometimes fair, sometimes dark. The Norn Urðr appeared in 1232 to a certain man named Snebjörn. She was a *tall, dusky* woman with red face, and wore a *dark-blue* dress. She sang a song about her ways, how she fared hither and thither to choose men for death, "flying like a dark bird" over hill and heath.⁵ . . . The death-norn was matched by a birth-norn, a fair and gracious creature, like the white dame who in German legends fetches children from the spring.⁶ In short, we conclude that the golden hair and dazzling white skin of Scandinavian gods was anthropomorphic, and was not founded on a moral symbolism.

¹ Thomas of Erceldoune, ed. Brandl. (p. 24 f.). The editor (p. 20 f.) gives parallel cases from medieval literature.

² Ibid., p. 23.

³ References in Child's Ballads,² II, 288 ff.

⁴ Studier, etc., p. 93 f.

⁵ Sturlungasaga I, quoted Mannhardt, Germ. Myth., p. 382.

⁶ Yet the Poles say that the "*White people*," i.e., elves, in the shape of little worms, cause sickness among mortals.—D. M.⁴, 968.

Not even among animals can we find a consistent dualism of color-symbols, with white for good luck and black for ill. The raven, as we have seen, is Satan's bird,—because he was once Woden's, not because the raven eats carrion and the devil devours souls, which is the explanation of Menzel.¹ With our Germanic forefathers, raven, eagle and wolf were "edle, mutige, *glückbringende*, . . . dem höchsten Gott geheiligt."² For Hrôðgâr and Béowulf, it is not the lark but the *black raven* who blithely proclaims the rising day:—

"hrefn blaca heofones wynne
blið-heort bodode."³

On Norse Odin's shoulders sit ravens and whisper wisdom in his ear; on the pope's shoulder, says a *märchen*, sit two (white) *doves* and tell him what to do.⁴ The names Hrafn and Krakr, Kraka, remarks Weinhold,⁵ were not in good favor in Norway, though very frequent,—for evident cause. That Valkyrias wore raiment now of swan, now of raven, shows how much importance we need attach to the white or dark gnomes, elves, and what not. Especially for the warrior was the raven of good omen: "to be followed by a dark raven is good for the swordsman."⁶ Survivals of this liking for the raven and of his good omen can be found here and there, despite the imported odium. Such is the case where ravens show in what place a *church* ought to be built.⁷ It is sign of heaven's dis-

¹ "Christliche Symbolik" II, 253 f.

² Grimm, Andreas—Elene, XXVII. Cf. also Rochholz, op. cit., I, 156.

³ For further proof of the raven's high station in Old Norse days, cf. "Hrafn" in Vigfusson's Dictionary, p. 281.

⁴ Cf. Grimm, D. M., p. 122, note and references.

⁵ Altnord. Leben, 275.

⁶ Different is the feeling in Shakspeare's time. Cf. "Jul. Cæs." V. 1:

"Ravens, crows and kites,
Fly o'er our heads, and downward look on us,
As we were sickly prey."

Cf. the opening of A. S. "Elene."

⁷ Müllenhoff, Sagen, No. 138. Other curious indications where a church or a castle is to be built are given by a *white horse*, by a *black bull*, by a *dappled mare* and by a *schimmel*—all this is in Schleswig-Holstein.

pleasure that the crows cease to remain over night in Amrum.¹ In Bohemia crows *bring the babies*.² But the modern idea of the raven is of the faithless messenger that did not return to the ark,—of an unlucky, ill-boding bird. It is “the emblem of darkness.”³ In the Harz, ravens are thought to fly about with burning coals in their beaks and set fire to things.⁴ The color of the white dove is undoubtedly symbolic, as compared with the unlucky hue of the gray or dark dove;⁵ but in many cases color has nothing to do with the character of a bird. Thus, in Danish legend, holy birds are the stork and the swallow;⁶ but the lapwing (Viben) is “forbandet.” “Da vor Herre hang paa Korset, da kom flyvende over ham Fugle tre. *En var hvid, og en var graa, en som en Turdeldue*.” In the sequel, “de to fløi henover;” but Turtledove perched upon the cross and had compassion with the sufferer.⁷ This is a striking case. Even the white dove appears in league with uncanny things: if with your bed-cover you catch a nightmare, shut it in a box, then open the box before a person has time to smother, there will fly out a white dove.⁸ According to one authority, the nightmare can appear as a small white butterfly.⁹

Cock and hen play a brave part in folk-lore, though the chicken is not so old a companion of man as one might think, having been a stranger to the Egyptians, as well as to the people of Bible days and to the time of Homer.¹⁰ But it was known to our ancestors and is mentioned in their myths. The cock has always borne some relation to light, and so to health. In Christian times its symbolic force, as enemy of the dark

¹ Müllenhoff, Sagen, No. 185.

² Wutke, Abergl., 116. See also, p. 125, old notion of good luck when crows flew across one's path.

³ Dyer, “Folk-lore of Shaks.,” 110.

⁴ Pröhle, “Unterharz Sagen,” p. 19.

⁵ Hehn, “Kulturpflanzen u. Haustiere;,” 280 f., 284.

⁶ Cf. the Rhodian song of the swallow which brings “fair seasons on black back and white breast.” Lang, “Myth., Ritual, etc.,” I, 94.

⁷ Thiele, “Dan. Folkes.” II, 304 f.

⁸ Wolf, “Beiträge zur deutschen Mythologie,” II, 267.

⁹ Grimm, D. S., No. 81.

¹⁰ Hehn, op. cit., p. 260 ff.

powers, has increased: out of a host of examples, cf. *Prudentius, Ad Galli Cantum*.¹ The cock is also symbol of fire:² "Den rothen Hahn auf's Dach setzen" means to set a house on fire; in Danish, "den røde hane galer over taget," crows on the roof, the fire crackles.³ In Scandinavian myth, the dark-red cock crows in the underworld, *soot-red, sótrauðr*. In folk-lore the black cock is conspicuous.⁴ The devil was once at work on a bridge. The white cock crows—but the devil only laughs; then the red—"that goes thro' my blood;" then the black—"that goes thro' my heart," and he vanishes. But in another case it is the white cock which crows last and drives away a ghost. Köhler notes that in our Scotch and English ballads the gray cock takes the place of the black. In a German ballad,⁵ the cock appears instead of fatal-croaking birds like the raven. "Heavendove" warns, but is disregarded; then comes "Hellcock" and says, "too late!" Black chickens are suitable offerings to the devil;⁶ but black animals in heathen times were acceptable to Freyr;⁷ and it is still good to give the "little people" blood of a black hen.⁸ A soul appears each midnight at the crossways in the shape of a black hen. In Elsass, to cure certain diseases of children, a black hen is offered to St. Veit;⁹ but a white hen is often offered on other occasions. In Switzerland "eine Kindbetterin darf nur Suppe von einem ganz schwarzen Huhn bekommen; ist ein weisses oder farbiges Federchen oder Fläumchen darin, so darf man die Suppe nicht geben."¹⁰ A *black hen* cut open and laid on

¹ Prudentius, ed. Dressel, Leipz'g, 1860: Cathamer., I.

² Menzel, op. cit., I, 366.

³ Grimm, D. M.⁴, 558.

⁴ R. Köhler, "Der weisse, der rothe u. der schwarze Hahn," *Germania*, XI 85 ff.

⁵ Cf. Köhler, p. 91.

⁶ For references, cf. W. Müller, "System," etc., p. 110, note.

⁷ Ibid., 264.

⁸ Such blood figures along with a "white cloth" as necessary part of an offering to the "Bergmännlein," by which the performer obtains great wisdom. Grimm, D. S., No. 38.

⁹ Zst. f. d. M., I, 408.

¹⁰ H. Runge, Z. f. d. M., IV, 1.

one's shaven head, is an old cure.¹ A black chicken is the right thing to sacrifice to the nix.² A black cock helps you raise treasure; and we even hear of two black cocks used *to plough up buried gold*.³ Witches ride on a black cock.⁴ All this seems perfectly orthodox. But the usual confusion is not far to seek. True, a white cock or hen keeps magic from the house, but so does a *black hen*—here a good omen—"denn die Hexen fliehen sie."⁵ In a form for *getting rid of a witch* and her bad influence, a *black chicken* is important; just as in another case a *black cock helps sorcery*.⁶ Then, too, the white chicken can make trouble. If a white chicken crows, it means death; if a red one, fire; if a black one, something will be stolen⁷—a sorry anticlimax for the dusky member. Among the Wends, a *white hen*, or a lovely white child, announces coming sorrow.⁸ The black chicken goes up to that maiden out of many who will be the first to marry, a most auspicious proceeding; and we reach the top round of its beneficent climax when we find a black cock sacrificed at weddings to insure a happy marriage.⁹

In the case of horses, color-dualism fares but little better. To be sure, the white horse has a long pedigree of honor and good luck. But it is a question how far whiteness *per se*, and how far the rare occurrence of this color, as if due to divine intervention, should be regarded as reason for the veneration it received. Whatever is rare, unusual, may seem, according to popular mood, now divine and now ghostly or devilish. What Lippert says about the worship of the white horse among Medes and Persians, and of the black bull among the Egyptians—one is tempted to draw the parallel of race—is here in point: "Es ist eine bekannte Thatsache, dass im Zustande der

¹ D. M.⁴, 980.

² Wolf, Beitr., II, 301.

³ D. M.⁴, 816.

⁴ Kuhn—Schw., Nd. S., 71.

⁵ Wuttke, Abergl., 113.

⁶ Z. f. d. M., II, 319, 327.

⁷ Wuttke, 189.

⁸ D. M.⁴, 950, note.

⁹ Ibid.; 263, 272.

Zähmung die Tiere ihre Farbe nicht alle so festhalten, wie die wilden. Unter dem Farbenwechsel erscheint dann der auffallendste als ein Zeichen besonderer göttlicher Andeutung. . . . So erscheint in der weissen Rinderherde ein schwarzer Stier als Apis, so in der dunkelfarbigem Rossherde das weisse Pferd als Götterpferd.”¹ White horses have this divine character not only in the East, but among Western races, like the old Prussians and our Germanic forefathers. Hehn, in his admirable work, assumes “den Gegensatz des weissen und schwarzen Pferdes” as religious symbolism,² and derives it from the East, that home of dualism. Slavonic tribes offered a white horse to Svatovit, god of light; a black one to Triglav, the evil power. This moral element looks suspicious, and was certainly foreign to any primitive stage of culture.³ The very fact that the black horse was offered by priests to a divine being, robs the ceremony of really moral dualism. For our own ancestors we have the testimony of Tacitus:⁴ “*proprium gentis equorum quoque presagia ac monitus experiri. publice aluntur isdem nemoribus ac lucis, candidi et nullo mortali opere contacti.*” But confusion sets in even for early times. In a ceremony by which horses foretold the future, they are described now as white, now as black, *nigri coloris, albi coloris*.⁵ To be sure, white remained the aristocratic color. Presents of white horses made to kings and princely people are of frequent mention. In “*Béowulf*” the four gift-horses⁶ are *æppel-feahwe*, fallow as apples, yellow, with the leaning towards “pale,”⁷

¹ “Kulturg.,” I. 159. For the white horse of the Medes, cf. Hehn, op. cit., p. 32 f.

² Op. cit. p. 44 f.; cf. also his note on Iranian influences, p. 478.

³ “Der slavische glaube stellt einen weissen und einen schwarzen gott auf . . . dieser dualismus scheint mir aber weder durchdringend noch ursprünglich.” Grimm, D. M.⁴, 822.

⁴ Germ., X.

⁵ D. M.⁴, 551 f.

⁶ B., 2165.

⁷ Richardson quotes, “Rom. of Rose”:

“Like that falowe horse of hewe
That in the Apocalips is shewed.”

Even the angels in Al Islam ride piebalds. Burton, Trans. “Thous. N.,” VI. 46, note.

but, we may assume, a rare color. With this adjective cf. "den gamle og velbekiende Sang," of which Thiele¹ gives a variation:

Ride, ride, Ranke,
Hesten hedder Blanke,
Hesten hedder Abildgraa
Den skal ——— ride paa.

Certain old fines were to be paid with "fahles oder bunt es v i e h;" and a "witgraw perd" plays a similar part.² Odin and his avatars ride the white horse or schimmel. A white horse denotes for Germanic races the leadership of its rider. "Saddle," orders king Richard on the eve of his last battle, "Saddle white Surrey for the field to-morrow."³ In the Kaiserrecht: "Dem Pabst ist gesetzt, dass er reyte auff einem blancken Pferde."⁴ St. Michael rides a white horse; and we even hear of the Christkind riding a schimmel.⁵ At the feast of St. George in Bavaria, the saint rides a horse of purest white, and is followed by six angels (boys) also on white horses.⁶ Of all the charms known to mythologists, none is more famous or more widely spread than that which tells how Wuotan cured the lamed horse of Balder.⁷ In some interesting forms of this charm given by Kuhn,⁸ we learn the color of the horse. Esthonian tradition says, "Jesus war ein Kirchengänger mit der Schecke, mit dem Schimmel;" but the horse is also red, black, "fischfarb," "mausefahl," etc. In a Norwegian version the horse is outright black. Modern royalty is apt to choose white horses for gala occasions; and the heroes of English and Scotch ballads show the same preference. Childe Waters rides a "milk-white" steed; so do the "fairy king and all his knights and ladies."⁹ Tam Lin is thus distinguished from his companions:

¹ I., 159.

² Grimm R. A., 588, 185.

³ R. III, V, 3.

⁴ Lippert, "Christenthum, Volksglaube u. Volksbrauch," p. 499.

⁵ Wuttke, p. 19.

⁶ Dahn, "Bausteine," 1, 217.

⁷ D. M., 1030.

⁸ In his Zst., XIII, 52.

⁹ Child, Ballads², II, 339.

"O first let pass the black, lady,
 And syne let pass the brown,
 But quickly run to the milk-white steed,
 Pu ye his rider down."¹

Again, the white horse is the *best*:

"The first steed that he rode on,
 For he was as jet-black,
 He rode him far and very far,
 But he fell down in a slack.

The next steed that he rode on,
 He was a berry brown;
 He bore him far and very far,
 But at the last fell down.

The next steed that he rode on,
 He was as milk so white;
 Fair fall the mare that foaled the foal
 Took him to Janet's lyke!"

In another version it is the "bonny apple-gray."² A steed both "sturdy and able," is coal-black;³ but this is exceptional, and the color suits the occasion. The white horse is a powerful symbol in Berkshire, Wiltshire and Kent.⁴

Odin's horse follows the same course as Odin's bird, and gets an evil name.⁵ The devil-horse is white; we meet this uncanny white schimmel, blind, three-legged and ridden by an old woman in black;⁶ it stalks through the village at midnight, and in whatsoever window it looks, in that house somebody will die.⁷ A white *helhest* brings the pestilence;⁸ though the Danish *helhest* is mostly black. White horses are often connected,⁹ or even identified with a witch.¹⁰ Frau Hulda

¹ Child, Ballads, II, 342.

² Ibid., III, 117, 121.

³ Ibid., I, 116.

⁴ Grant Allen, "A. S. Brit.", 28.

⁵ Müllenhoff, 288, 309, 322.

⁶ Ibid., 335.

⁷ "Gleich . . . todesengel zieht die nordische *Hel* mit ihrem rosse umher; D. M.⁴ 990: cf. 704: "in times of pestilence (the goddess) *Hel* rode about on a three-legged horse and strangled people."

⁸ Thiele, II. 58.

⁹ Müllenhoff, 288.

¹⁰ Ibid., 309.

rides a "splendid schimmel."¹ To avert a flood (Harz), they throw two white horses from the castle into the river.² Then, with the theological force of black symbols, there enters the usual confusion. In the legends innumerable ghostly folk are drawn by black horses, like the magic steeds of Mephistopheles; but white horses abound in similar plight. Hr. Stig Hvide comes "*kiprende med fire hvide Heste*." His wagon "*gjør støi*," and people say, "*paa Hr. Stigs Veie voxer der intet Korn*."³ Again, certain old lords spook o' Jule nights in a chariot "*med sex hvide Heste for, hvilke ere gruelige at see, eftersom de have lange gloende Tunger*." A stately warrior on a white charger is a companion piece.⁴ Men on white horses follow and threaten folk, but sometimes are helpful. It is told⁵ of Tilly, at Pforzheim, that he kept praying to the Virgin and refused to leave the church and seek the field of battle. "She is fighting for me," he said. And it was true; on the field a horseman appeared, "in green Spanish mantle and on a white horse." The mass of medieval stories about ghostly riders can give little ground for the assumption of dualistic color-symbolism. A great many legends tell how some famous man—Theodoric, for instance—rides off to hell on a coal-black steed; but the white horse carries many another. The Danish *Damhest* is sometimes "*en lang hvid Hest*," sometimes "*en uhyre stor, sort Hest*."⁶ The white horse brings pestilence and death; but a maiden on a white horse goes about warning people of possible harm.⁷ Is a white horse lucky? Yes and no. In Bohemia no schimmel must pull the bride to church; in East Prussia they will have no other sort of horse.⁸ A survival of the old cult lingers in a superstition of the Harz: "*Wenn schwangere Frauen 'übergehen,' so müssen sie Hafer in die Schürze*

¹ Z. f. d. M., I, 28.

² Pröhle, Unterh. Sag., p. 23.

³ Thiele, II, 55.

⁴ Ibid., II, 139.

⁵ Z. f. d. M., I, 33. Hessian legend.

⁶ Thiele, II, 291 f.

⁷ Laistner, Nebels., 217.

⁸ Wuttke, 348.

thun, den einen *Schimmel* fressen lassen und ihn bitten für ihre baldige Entbindung zu sorgen.”¹ But the white horse plays a sorry part in that old form of punishment² which consisted in setting the criminal “*hinterrücks auf einen weissen Gaul* ;” and that the sense of color-symbolism had nothing to say, is proved by a similar position for a similar purpose, “*rücklings auf einen schwarzen Widder*.”

The same confusion about color holds in the case of the dog. To be sure, black dogs are familiar enough as companions or incarnations of the devil. Treasure is nearly always guarded by one of these swart satanic dogs; but there are cases where a white dog performs the office.³ The Wild Huntsman has black dogs, and appears as a black dog himself;⁴ but in Elsass a man once heard over him the rush of the wild hunt, clutched high in air with his hand, and seized a “*weisses Hündlein*.”⁵ The dog which runs with Herodes in his nightly chase wears that other ghostly color, gray.⁶

The food for these wind dogs ought to be black. An old woman at Munderkingen was wont to cook “*schwarzes Mus*” and put it out on the roof, saying “man müsse die Windhunde füttern.”⁷ Take a black dog with you to pull up the mandrake (which is afterward kept in *white* covering);⁸ but to cure convulsions, powder and swallow certain parts of a white dog.⁹ The black dog coursing about one’s fields generally means mischief; but in Posen a black dog runs at nightfall through the grain, and this always indicates *a good crop and full ears*.¹⁰

Both colors often meet, as with other cases, in the same individual. A shepherd who had meddled with sorcery haunts a certain spot along with his herd. He stands “*im weissen*

¹ H. Pröhle in Z. f. d. M., I, 200.

² Grimm, R. A., 723.

³ Kuhn Schw., Nd. S., p. 294.

⁴ Mannhardt, Ger. Myth., p. 50.

⁵ Z. f. d. M., I, 402.

⁶ Kuhn, Z. f. d. M., I, 100.

⁷ Mannhardt, Roggenwolf u. Roggenhund, p. 5.

⁸ A. Lang, Custom and Myth, 145. D.M.⁴, p. 1006.

⁹ Cockayne, A. S. Leechdoms, etc, I, 365.

¹⁰ Mannhardt, Roggenwolf, etc., p. 27.

Zwillichkittel . . . *ein weisser Hund mit schwarzem Kopfe* sitzt neben ihm."¹ We find a black dog leaping out of a white block in order to give Satanic aid;² and witches ride to the tryst "*auf bunten Hunden*."³

The dog is the oldest of domestic animals;⁴ and he consequently takes a prominent place in popular legend and in myth⁵—Hindu, Greek, Scandinavian. Often of evil omen, a sign of sickness and death, the dog may also help to discover and ward off supernatural harm. He scents the pestilence and warns men of its approach; he often detects the impending outbreak of fire.

The same confusion exists in the case of the cat, a much more recent acquisition for domestic life.⁶ Once sacred to the goddess of love, the Germanic cat sank to the base uses of witchcraft. A black cat is very likely to be a witch, or a lost spirit; but yet, wherever folk-lore has preserved ancient reverence, the black cat is regarded as ally and assurance of domestic good fortune⁷. It depends on the point of view. On moving into a new house, carry the cat thither *in a black apron*, and let it be the first to run over the threshold,—an evident survival of primitive sacrificial rites.

"Die schwarze Katze, das schwarze Huhn
Soll kein Bauer aus dem Hause thun."⁸

A rude logic which connects black, the absence of light, with the absence of sight, is in the Tyrolese superstition that a certain part of an absolutely black cat, if worn on the thumb, makes the wearer invisible.⁹ But the main point is to prove

¹ Laistner, *Nebelsagen*, 237.

² Müllenhoff, 282.

³ *Ibid.*, 289.

⁴ Hehn, 374.

⁵ Rochholz, *op. cit.*, I, 158 ff.

⁶ Except among the Egyptians.—Hehn, 374.

⁷ Rochholz, I, 160 f.

⁸ *Ibid.*, 161. R. gives other interesting illustrations of this confusion.

⁹ Z. f. d. M., I, 237 —The same result attends the drinking of milk from an entirely black cow; eating the eggs of a black hen; the offering of three black hens; or drinking the blood of a swallow and of a black cat. Curious is this recipe of the sixteenth century: "Take three young swallows, 'break out' their eyes, and bind them with a silk thread about your legs. On the fourth morning cut them open and you will find three stones: 'der eyne ist roth (*ad amorem*) und wer den in dem Munde hatt, den dürstet nicht, der ander ist grünen, welche fraw den bei ihr hat und ist schwanger, die stirbet nicht an dem kinde . . . der dritte ist niger oder schwarz, und welcher den in seiner hand thregt, der ist unsichtig.'" —Bartsch, in Z. f. d. M., II, 332 f.

confusion of color-symbolism. It is unlucky to meet black cats; and when a friendship has been broken, people say: "Daer is een zwarte kat tusschen gekomen."¹ On the other hand, a black cat buried alive in one's field secures good crops.² A black cat crossing one's path means bad luck; but in Bohemia it is the white cat or "milk cat," which appears at one's window within two hours of one's death.³

Deer, though less common in legend and folk-lore than the animals already mentioned, are frequently met, particularly the white deer. They play an important rôle in legends of the Harz, and occur in many other stories and ballads. Symbolic is the color in a story told by Thiele.⁴ Near Kallundborg took place a battle between the Christian and the heathen king. At a previous conference of the two, the former saw that his foe wore a silk cord tied about his body. In the midst of the fight came a *hvid Hind* springing over bush and thorn, and it had a splendid gold chain about its neck. The Christians shoot at it; as it falls, the heathen king sinks also and is dead. Even here the color has no absolute and emphatic symbolism; while in other cases we meet the inevitable confusion. A black stag brings its owner to the devil;⁵ but a black stag is in the Stolberg coat of arms. Golden-hued or white stags abound, do good or mischief: "beides," says Pröhle,⁶ "ist mit dem schwarzen Hirsch gleichbedeutend." Pure indifference to color is found in the legends which make now a white stag, now a black one, show where a castle is to be built.

Goats as well as sheep were favorite animals for sacrifice; and were later closely associated with witchcraft. The devil himself presided at these witch-assemblies in the shape of a *black goat*;⁷ while a white one bans devilish influences. Goats,

¹ Wolf, Beitr., I, 227, 231.

² Wuttke, Abergl., 280.

³ Ibid., 187.

⁴ Danm. Folkes., I, 8.

⁵ Pröhle, "Unterh.-Sagen," p. 192.

⁶ Ibid, 194 f.

⁷ D. M., 831.

however, had been sacred to Thor, whose honest, helpful ways made his subsequent diabolification extremely delicate work. Hence we sometimes find black goats as ministering spirits, sometimes actively satanic. A "tall fellow" on a huge black ram is very helpful, and guides a swineherd to a treasure; while he that digs for hidden gold does well to take two *black kids* along with him.¹ "The Spectator" has rescued an odd survival of early law,² in which the color symbolism plays its part. In Nos. 614 and 623 we are told that a widow by indiscretion loses her share of her husband's estate, but may redeem it "if she will come into the court *riding backward on a black ram*." In No. 623 there is mention of the substitution of a *black ox*. In contrast to this saving virtue of the beast is his harmful significance when, to injure the crop of a neighbor, one must ride through it backward on a *pitch-black ram*: if this cannot be had, take "a yellow pig."³ In the beautiful superstition of Norway and Sweden, it is the spirit of the waterfall who teaches man the art of song and music.⁴ In Sweden, one offers him a *black lamb*; but in Norway a *white kid*: then he "seizes the player's right hand, and swings it back and forth till blood spurts from the finger-tips; now the 'prentice has learned his lesson, and can play so that the very trees will dance."⁵ Offerings of black rams have been customary in all times and places. Such a sacrifice is still useful in raising buried treasure; but on the other hand, "man muss einen *weissen geissbock* durch den stall jagen um den da liegenden schatz zu heben."⁶ Lastly, we find the usual shrewd notion of combining the virtuous colors; and to redeem treasure given to the devil, we are advised to take to the spot "a *black and white ram*."⁷

Black cattle, "*oxn alsvartir*," were the pride of the giants Thrymr and Hymir, and are still of some importance in folk-

¹ Pröhle, Unterh. Sag., pp. 86, 89.

² Cf. Grimm, R.A., 453.

³ Dahn, "Bausteine."

⁴ Cf. Henrik Ibsen's exquisite "Spillemænd."

⁵ Uhland "Der Myth. v. Thor," p. 183.

⁶ Haupt-Zts. 3, 315; Grimm D.M.⁴, III, 290.

⁷ Müllenhoff, 276.

lore. To kill black oxen, says a superstition, is dangerous; and there is a phrase "die schwarze Kuh drückt ihn," . . . "hat ihn getreten." Grimm asks¹ what this means; and Ipolyi² answers "misfortune:" a Hungarian proverb calls the fortunate man "son of the *dappled* cow." Mannhardt refers, as usual, to Day and Night, and quotes a Lithuanian saying:³ "Die *schwarze* Kuh hat alle Menschen todt gestossen, die *weisse* sie wieder lebendig gemacht." Moreover, nightmare is sometimes called "die schwarze Kuh."⁴ Very good. But why is not the black ox or cow uniformly unlucky? Supernatural plowing with two black bulls, a common legend, may of course be satanic; but Austrian peasants believe that coal-black oxen, without a white hair, "sind zu allerlei gut";⁵ and this is prettily matched by the superstition that you can *protect a town from witches* if you *plow around it with two black cows*,⁶—homœopathic treatment. For the bliss-bringing white, take the "*Abneigung . . . gegen das weisse Vieh*," for which Rochholz gives proof.⁷ Sell a white calf at once, says popular wisdom; it is good for nothing. As to the safe compromise of dappled kine, one thoughtful act of a "bunter Stier" should certainly go on record. It was wont to rise from a lake every Sunday in order to bring a certain cowherd clean linen.⁸ Here's richness for the myth-mongers.

Throughout the list of animals, folk-lore seems to lay no stress—or only a vague and uncertain one—upon the symbolism of color so far as white and black are supposed to represent respectively good and bad luck. For one more instance, take the mouse. Mice represented souls, actually were souls, for our ancestors;⁹ and are of some account in folk-lore. A nimble, uncanny little beast, the mouse, slips as a dreamer's or dying

¹ D. M.⁴, 554, note.

² Z. f. d. M. I. 271.

³ Ethnol. Zst. 1875, 308.

⁴ Mannhardt, Germ. Myth., p. 79.

⁵ Z. f. d. M. IV, 32.

⁶ East Prussia: Wuttke, Abergl., p. 268.

⁷ Op. cit., II, 263.

⁸ Kuhn-Schw. Nd. Sag., p. 257.

⁹ Rochholz, op. cit., I, 156 ff.

man's soul out of his mouth. Faust saw a red one run out of the pretty witch in the Walpurgis night. Often it is a black mouse and a lost soul. When a heathen image was overthrown in Rügen, a "dæmon in furvi animalis figura penetralibus excedere visus."¹ This is a wide-spread superstition. The soul leaves the mouth as a *white weasel*, as a *blue mist*,² as a *black animal*, of any (small) kind; and a good man's soul goes off as a *white cloudlet*.³ The souls of two mischief-making women take the form of *black smoke*.⁴ A single case of confusion in color-symbolism will serve our purposes. White mice, says one superstition, are lucky beasts, and protect the house they live in⁵. White mice, says another, are of ill omen; numbers of them (and they come not single spies, but in battalions, as every schoolboy knows) indicate "pestilence or war."⁶

So much for the dole and delight of animals; but "sunt lacrimæ rerum," and we may glance a moment at the color of ordinary objects. Tacitus tells us that at the old Germanic casting of lots the bits of wood were scattered "super candidam vestem."⁷ Holzmann⁸ connects this⁹ with the rites of the Druids, and also quotes the Vita S. Martini: "quia esset hæc Gallorum rusticis consuetudo, simulacra dæmonum *candido tecta velamine* misera per agros suos circumferre dementia." In survivals of the Germanic sword-dance,¹⁰ which have been collected by Müllenhoff,¹¹ the youths are clad in white shirts; so with the dancers in Scott's "Pirate," where the master, as St. George, has a "hempen shirt" thrown over his clothes; so with the young fellows who pull about the plough in the

¹ Saxo Gram. quoted Lippert, "Rel. d. eur. Cultury," p. 94.

² Laistner, Nebels., 128.

³ Wuttke, 294.

⁴ Grimm, D. S. No. 249.

⁵ Ibid, 118.

⁶ Wuttke, 188.

⁷ Germ. X.

⁸ Germ. Alterth., 179, 255.

⁹ "Sacerdos *candida veste*," etc., Plin. N. H., XVI.

¹⁰ Tac. Germ., XXLIV.

¹¹ "Ueber d. Schwerdtanz," in Festgaben f. Homeyer, Berlin, p. 111 ff.

familiar festival; so, thinks Müllenhoff, with the sword-dance and its variations in all countries.¹ This was once, of course, a sacred ceremony. White robes seem to have been the priestly costumes of our own forefathers, judging from the famous account of the Cimbrian women in Italy, who, dressed in white, with a sort of red overdress, cut the throats of the captives and interpreted omens in the flowing blood. Various ceremonies of witchcraft and the like are to be carried on in white robes. Pliny mentions an herb, which has to be stolen (a common requisite) by a person dressed in white.² We have already seen the mandrake pulled out by a black dog, and then carefully wrapped in white silk.³ The white cloth mentioned by Tacitus is suggested by a superstition that one can protect oneself from the Wild Hunt by *standing on a white cloth*, or by binding it about one's head.⁴ A white cloth flung over a flower restores to her proper person a girl who had been enchanted into this shape.⁵ A piece of white cloth plays the part of the enchanted mantle, carpet, etc., in the stories, and carries a man from Harz to Venice.⁶ But, as usual, the white cloth has its evil side. The pestilence, in the guise of a tall woman, shakes her white cloth at people and so infects them. Sometimes, however, it is a black cloth. A great many cases occur where a white cloth is sign of death, the shroud being an evident suggestion;⁷ but to pick up a needle with black thread attached is a sign of the same thing.

The mention of white robes could suggest much in the way of symbolism: there is room for but one point, the wearing of linen by kings and priests. Hehn insists on the symbol of "light and purity,"⁸ and notes how the Egyptian and Asiatic custom passed into Europe. Linen was worn by Germanic races early in the Christian era and was highly esteemed

¹ Even a Spanish dance is cited, p. 145.

² Cf. Cockayne, "Leechdoms," etc., I, XV.

³ Cf. Holtzmann, "Deutsche Mythol.," p. 220.

⁴ Wuttke, Abergl., 18.

⁵ Grimm, Märchen, No. 56.

⁶ Laistner, Nebels., 193.

⁷ Wuttke, 199.

⁸ Hehn, op. cit., p. 138, 146.

for obvious reasons. That this had influence on myth and legend is probable enough. Black cloth, however, is early noted as useful in the superstitious cures and leechdoms. "Se wifmon, se hyre bearn afedan ne mæge, genine heo sylf hyre agenes cildes gebyrgenne dæl, wry æfter þonne *on blace wulle*, and bebiege to cepemannum and cweþe þonne:

Ic hit bebiege, ge hit bebiegan
þas sweartan wulle and bysse sorge corn."¹

Kuhn quotes from Chambers' Fireside Stories,² a case where a sprain is cured by whispered charms and a thread "spun from *black*."

Black and white amount to the same thing in witches' manipulation. Thus we have a white wand which will lame or kill cattle. A witch stirs just such a white wand in the water and causes dire thunder. We find, however, black wands just as harmful. On the other hand, trusty Eckhart carries a white staff, as he goes along warning people to avoid the Wild Hunt.³ In the *märchen* "Der singende Knochen," Grimm, No. 28, a young man, "because his heart is pure," receives from some helpful being "*einen schwarzen Spiess*," which will kill the most savage boar. Sometimes the color is evidently meteoric. To throw a white stone in a certain lake, brings hail; a black stone, rain; cf. the riddle: "I am white and grow black," *i. e.*, melting snow.⁴ But this explanation will hardly serve for the legend where Gangolf, a saint, buys a *spring of water* which follows him home as a *white cloud*. But another saint is followed by a *black cloud*, and this black cloud, moreover, shows the saint *where a monastery is to be built*.⁵ Of magic things which have both colors, may be instanced the "moly" with its black root and white flower.⁶ Somewhat the same is Milton's invention, the *Hæmony*.⁷

¹ Wülker-Grein, I, 327.

² P. 37. Cf. also D. M.⁴, 1031. Kuhn, Zst., XIII, p. 52.

³ Mannhardt, Ger. Myth., p. 50.

⁴ Laistner, op. cit., 228. Similar cases, p. 295.

⁵ Laistner, op. cit., 196, 203.

⁶ Hehn, p. 167.

⁷ Comus, 630 ff.

Taking the mass of popular legends and of folk-lore, symbolism is frequent and undeniable. When at the Witches' Sabbath the Christian Service is parodied, and a "black Host" is brought in, the motive is evident.¹ The notion that when a man is going to die, black clouds gather over the house where he lies; or that whenever a bad man is begotten or born, the heaven grows dark,² or that a perjurer turns black,³ —all this is easy to account for. A maiden who had promised to tell no mortal her sad story, whispered it to a stone in the Rathhaus: the stone, till then red, turned dark-blue for pity.⁴ Nor is it difficult to see how black may mean "unheil" in the case of lots, divinations and the like. Müllenhoff⁵ quotes Saxo (p. 827) about the lots which were cast by certain Wends. They threw three bits of wood, white on one side, black on the other: white was the good omen, black was bad. In "Bonnie Annie," Child, Ballads, I, 245, where there are "fey folk in our ship"—

"They've casten black bullets twice six and forty,
And æ the black bullet fell on bonnie Annie."

Again,⁶ on the island Femern, in order to detect the culprit out of six men, six little sticks, *five white and one black*, were put into a vessel whence the men drew. The black meant guilt.⁷ It is an easy transition to cases where the change of hue in some objects indicates a change of fortune in the giver. Grimm⁸ tells of a sword which was owned by a Countess Rantzau: if the sword turned black, it meant the death of a member of the family. A common object of this sort is the shirt given to the husband by the wife: it will hold its whiteness, unless she prove unfaithful, when it will be spotted, or unless she die, when it will turn black.⁹ In one

¹ Wessely, op. cit., p. 96.

² D. M.,⁴ III, Vorrede, XI.

³ Grimm, D. S., No. 101.

⁴ Kuhn-Sch., Nd. S., 249.

⁵ Zur Runenlehre, 30.

⁶ Müllenhoff, p. 36.

⁷ Cf. also Grimm, R. A., 936.

⁸ D. S., No. 41.

⁹ Child, Ballads², II, 268 f.

case, red is the fatal color. The magic garment of the ballad "The Boy and the Mantle,"¹ is now "gaule," now "green ;"

" Another while was it *blacke*
And bore the worst hue."

M. Portal tells² of a high-priest who had a wonderful diamond. When he went into the sanctuary, the diamond had power to turn white before a happy event, red in time of war, or black when woe was impending. All this is as it should be. But the homelier legends of Germany are not so clear about the symbolism, and even in this lore of signals we meet the fatal color-blindness. We remember, of course, the white and black sails of the returning bark in Grecian and in mediæval poetry. In the *märchen* of "Die Zwölf Brüder," a white flag is good omen, and red is bad. But a legend of Schleswig-Holstein tells of a princess who watched from a window the spot where her lover was to be put to death. They have agreed that if at the last moment he is pardoned, he should show a *red cloth* ; if there was no hope, a *white one*. He is pardoned ; but by mistake the white cloth is shown, and the princess kills herself.³ In the castle at Schwerin, "ein kleines Petermännchen," dressed in gray clothes, puts on red if war is coming, black for death.⁴ That is right. But the princes of Fürstenberg see a white dame in case of death, and a gray man in case of a wedding.⁵ A woman who dies in witchcraft promises her pastor if she is saved she will reappear as a white dove, if lost, as a crow ; but another soul of the same neighborhood comes back in the shape of a white dove to announce that it is—lost.⁶

Like the uncertainty in regard to lucky and unlucky days of the week,⁷ all this confusion about the symbolism of white and black points to the clash of two creeds. As we leave the physical world, with its contrast of day and night, of heat

¹ Child, Ballads, II, 272.

² Des Couleurs Symboliques, p. 54.

³ Müllenhoff, Sagen, 51.

⁴ Kuhn-Schw., Nd. S., 1.

⁵ Ibid., 316.

⁶ Müllenhoff, 287, 310.

⁷ Cf. Wuttke, p. 59.

and cold, and approach the moral, all dualistic notions of the two colors tend to fade away from folk-lore; and such symbolism of the sort as we do find, is plainly of clerical origin. The mob of gods who peopled our Germanic heathendom knew no sharply sundered ranks of good and evil; and wherever legend or folk-lore has rescued fragments of ancient creed, there we are pretty sure to find traces of the old indifference. Jacob Grimm thought the "beziehung von weiss und schwarz auf heil and unheil" too evident a process to be appropriated for any one mythology. Yet for Germanic traditions, as the above material shows, this symbolism must be confined to very narrow limits; and the allegory in Grimm's quotation from Herbort von Fritzlar, like that of the opening of "Parzival," seems to be distinctly theological in its origin.

FRANCIS B. GUMMERE.

HAVERFORD COLLEGE STUDIES

Published by the Faculty of

HAVERFORD COLLEGE.

No. 2

Price \$1.

CONTENTS.

	PAGE
The rest of the Words of Baruch. J. Rendel Harris	1
Some Esarhaddon Inscriptions. R. W. Rogers	65

To obtain copies of this publication address the Secretary of Haverford College, Haverford College P. O., Pa.

THE REST OF THE WORDS OF BARUCH.

THE present work is designed to draw attention to an important but hitherto much-neglected fragment of Apocalyptic literature which seems to me to be valuable, in spite of the contemptuous treatment which it has met with at the hands of the critics, both to the Ecclesiastical Historian and to the Christian Dogmatist; to the former, on account of the light which it throws on one of the most obscure periods in the growth of the Church, that, viz., which includes the revolt of the false Messiah; to the latter, because it helps us to see the manner in which one of the leading doctrines of the Christian Faith polarized the worshippers for and against itself (as almost every point of Christian doctrine does at some time or other in the history of the Church), and setting a man at variance spiritually with his fellow brought it to pass that the sword came down in the house itself to separate the undecided and half-hearted from the convinced and the faithful, that the many who were called might make way for the few who were chosen. And certainly when we say that in this tract the reader will hear the final farewell of the Church to the Synagogue, and that the parting words will be concerned with the doctrine of the Divine Nature of Jesus Christ, we have a right to ask for it a closer and a more careful perusal than it has hitherto met with. Nor is this the only reason why it should be made an object of attentive study. We hear much said now-a-days about the interpolation of Jewish Apocalypses by Christians, and it becomes a very interesting matter for critical study to determine how far such a tendency to the absorption and republication of earlier literary productions prevailed in those centuries which were especially marked by Apocalyptic activity, and in what manner that republication was commonly effected: for it is certain that in the early Christian literature we constantly disinter fragments

of earlier workmanship, and equally certain that nothing leads to such reckless criticism as the unskilled or half-skilled attempt to detach the embedded earlier form from its surroundings. The present tract is one in which we are able to point out not only, as I have intimated above, the exact date of its publication, but a great part of the earlier material which the writer appropriated. We can watch the bookmaker at his task, and can, so to speak, mark the places where the scissors and paste have been used; for this Apocalypse is the degenerate offspring of an illustrious line, perhaps the very last scion of a noble house. The Apocalyptic literature connected with Jeremiah and his companions must have been extensive and popular, widely read and full of household words; and a great part of this literature is still extant. We are therefore favourably placed for the study of an interesting problem in early religious teaching.

We may remark further that the Semitic and quasi-Semitic literature is at its best in the region of Apocalypse: the historical situations are better preserved because of the way in which they have been disguised; the cipher in which the story was written has prevented the text from being tampered with. Apocalyptic writers do not deal in the flatteries which so often deface ancient history. Josephus, for example, writing of the expected Messiah and in the hope of pleasing his patrons, will have Vespasian for his Coming One; but this adroit deviation from popular belief would not be worth publication unless it were made known both to the princes whom he designed to propitiate, and to the masses whom he proposed to enlighten. If he had held a contrary opinion or wished to inculcate it (for no one knows what the real opinions of this agreeable diplomatist were) he would have been obliged to write in allegory, cipher, or Apocalypse, and for the few rather than the many. Vespasian would have been an eagle or a dragon, or a dense forest or something of the kind. But we should at least be sure that we had got at his real opinions. Apocalypses, then, are the truer by their very falsity. The opinions which the writer disguises are his genuine opinions.

Further than this, they are his opinions, generally speaking, upon burning questions. Apocalypses concern themselves with the most critical situations in the experiences of men and nations; they touch the deeper exigencies of life; they debate

the inconsistencies of man's conceptions of God and the Universe; they discourse on the Providence and Fore-ordination of the Almighty, as it were, to His very face. St Paul is content to state his belief that Adam sinned and, ergo, all men sinned. With the Apocalyptic Baruch or Ezra, the calm theological statement becomes a burning passionate question, "O thou Adam! wherefore hast thou sinned?" In the same way the decline of the Jewish polity is predicted or recorded with much calmness by the Apostles; "the wrath is come upon them to the uttermost" is the sum total of it; an Apocalypticist, on the contrary, is spurred to write not so much by the fact, as by grief over the fact. His head must needs be waters, and his eyes a fountain of tears. The highest national hopes, too, find their expression in this way: the coming of Messiah, the fall of Rome, the end of a captivity, the imminence of judgments,—all these things require bated breath in the speaker; and we hear him more clearly because he whispers. We know more of the national aspirations of the Jews from their Apocalypses than from all the histories that are extant: which is the same as saying that Apocalypse is one of the highest forms of historical record.

Our document furnishes us, as we shall see, with an illustration of the truth that almost all apocalyptic literature belongs to special historical crises: there are very few books of this kind which do not shew, in addition to disguised facts, disguised figures; the chronology is in cipher as well as the story: the number of years to Messiah's kingdom and to the fall of the great Eagle must be given, but not so that the great Eagle can read it. Time, times and half-a-time, says the Apocalypticist in answer to the passionate 'How long, Lord' which is being repeated inwardly by the people; and then a convenient key is given, and some note which shall epigrammatically attract attention, such as *ὁ ἀναγινώσκων νοεῖτω*, or a rude hexameter scrap, like

** Ὡδε ὁ νοῦς ὁ ἔχων σοφίαν.*

These crises in history and their associated revolutions in thought furnish the Apocalyptic situation: and it is therefore no surprise to us to find a redundancy of this kind of literature near the period calculated for the birth of the Messiah, or subsequent to the fall of the city under Titus, or its further desolation under Hadrian. But there is one further point which is not so

evident and which does not indeed lie in the nature of the case, but which is very important for the appreciation of Jewish Apocalypses; namely, the tendency which they shew to periodicity. The apocalyptic is not merely a prophet; he has become so by taking a cyclical view of the history of his people: that which furnishes his time-key in determining the duration of a captivity is the duration of a previous captivity. So many flights of the Phoenix, so many Jubilee periods, and then human things will return upon themselves. He expects God to repeat himself in history, and the more so as he sees history repeating itself. It was inevitable that the Jews should indulge Messianic hopes seventy years after the capture of the city by Titus: and they indulged them the more actively as the seventy years ran out.

Nor were they without some encouragement to this belief from actual event. One of the things written across Jewish history was the fatality connected with the 10th of Ab. We may get some idea of the import of this day by recalling the language of Josephus concerning it: "the fated round of times was come, the tenth day of the month Lous, on which aforetime the city had been burnt by the Babylonians" (*Bell. Jud.* vi. 4. 5). He does not hesitate to say that the time had been calculated by God; "one might rightly marvel at the accuracy of the cycle; for it was the very same month and day on which the city was formerly burnt by the Babylonians" (*Bell. Jud.* vi. 4. 8).

So deeply was this day marked with black in their calendar that there is reason to suspect that from that day to this it has been kept as a day of mourning both by Jews and Christians. With the Jews, of course, this is obvious: but the following considerations suggest that the Christian Church also shared this mourning with them. The Greek Church keeps a special memorial of the fall of the city on the 4th of November, and reads on that day, as we shall see, a portion of the very Apocalypse which we are engaged upon. But the question naturally arises as to how a memorial designed for the Fall of the City came to be read on this date. The answer is that Ab, which is the eleventh month of the Hebrew Calendar, has been replaced by November, the eleventh in the Julian year, while some reason not known to us has displaced the day from the tenth to the fourth¹. We may,

¹ We shall see by and bye that our Christian Baruch has the month of Ab in his mind as the commencement of the Exile. According to the Talmud Bether was captured on the 9th of Ab.

therefore, suspect that Christians as well as Jews concerned themselves to note the fatal day¹. And it was inevitable that the observed periodicity in the dated fortunes of the city should lead to a belief that the period of oppression would also run parallel with the history of the earlier Captivity. At all events this is a sufficient explanation of the excited state of the Jews in the last decade of the seventy years which followed the destruction of the city. Perhaps a similar consideration of other periods mentioned in history or prophecy will furnish us the explanation of the appearance of the other Apocalyptists, Ezras, or Jeremiahs, or Baruchs. This reasoning finds its confirmation when we proceed to the examination of our own especial document. We shall shew presently that it is a disguised history of the 66th year after the fall of the city: and the meaning attached to the number 66 is sufficiently evident from the fact that in many MSS. it has been corrected to 70. The number was seen to belong to the close of a cycle, what we may call the iron number of the captivity of Zion². We will return to this point presently; but before discussing our Christian Baruch more closely, it is as well to say a few words about the earlier Apocalypses from which it is descended.

The Baruch literature begins, of course, with the Apocryphal Baruch of the Old Testament, a work which is still much in dispute, both as to the language in which it was written and the place and period to which it should be assigned. That it is præ-Christian may, however, probably be assumed; so that it differs from the rest of the writings which bear the name of Baruch, all of which belong to the period of the second Captivity (using this term for the result of the Roman War under Vespasian and Titus). At the same time this Apocryphal Baruch, though belonging to an earlier period, furnishes the suggestion for the later writings, and it may be anticipated before comparison that there will be numerous parallelisms in thought and expression between the

¹ We observe that the Menæum heads the service for this day, *Διήγησις εἰς τὸν θρῆνον τοῦ προφήτου Ἰερεμίου περὶ τῆς Ἱερουσαλήμ, καὶ εἰς τὴν ἄλωσιν αὐτῆς καὶ περὶ τῆς ἐκστάσεως Ἀβιμέλεχ*. This of itself is strongly suggestive of the commemoration of the fatal day, and the allusion to the lamentation of Jeremiah shews that our tract has replaced an earlier book which was used in the commemoration service.

² The chronological parallels have been strained by the Jews to the detriment of the history, so as to make the Hadrian war last three years and a half; the time of the earlier hostilities: Renan rightly remarks (*Origines*, Vol. VI. p. 208, note) "ce dernier chiffre suspect; on a modelé le siège de Béthér sur celui de Jérusalem."

early apocryphon, the prototype, and the later brood. But these parallelisms hardly come into account in what we are occupied about, and it is sufficient to refer to any of the good writers upon Apocalyptic literature for the verification of the relations that have been intimated. We call this book, for distinction, the Apocryphal Baruch (or simply Baruch).

With the next book, which we call the Apocalyptic Baruch, we have more to do; for not only is it a very important work, but, as we shall see, the connexion between it and our Christian Baruch is very marked. It was first published by Ceriani in *Monumenta Sacra et Profana*, Tom. I. fasc. i., from a Syriac MS. in the Ambrosian Library¹; Ceriani at first reserved the Syriac for a future edition of the Old Testament, and gave only a Latin translation; but in response to appeals which were made to him by various scholars, he printed the whole of the Syriac text in the fifth volume of the *Monumenta*. Until Ceriani's publication nothing was known of this apocalyptic Baruch, except the letter of Baruch at the close of the book, which is extant in many MSS. and has often been printed. An examination of this book, in detail, is not within our scope; it will be sufficient to enumerate a few of the more definite results which come to light when the processes of criticism are applied to the book. First of all, then, the writer was a Jew, and a pious Jew, living in troublous times. He laments many who have deserted the Covenant and have cast from them the yoke of the Law, but consoles himself on the other hand that there are many 'who have left their vanities and taken refuge under the shadow of thy wings.' The last expression is the proper one for indicating proselytism. For example, it is the term used by the Jewish Fathers in describing the persuasive powers of the good Hillel; "the gentleness of Hillel brought us near under the wings of the Shekinah;" nor should we be wrong in inferring that those who have deserted the law have done so under the influence of an adverse proselytism which is undermining or replacing Judaism. The Law, too, is his last Jewish citadel. The city was in ruins when he wrote (and we need scarcely say that this desolation was not that of the Babylonian Captivity), and in the face of this disaster, the only religious anchorage was the Law; we know well the zeal with which the Jew turned in his exile from the

¹ The MS. is said to be as old as the sixth cent. Its class mark is B. 21 Inf. Ceriani has given a lithographic specimen of it.

Holy City to the pages of his holy book: "Unless thy law," said Zion, "had been my delight, I should then have perished in my affliction." To hold fast by the Law is the main precept; and the more so, because the end must be near: we pass away, but the Law remains. The end of all things is at hand; the pitcher is near the fountain, the ship almost in the harbour, the journey has the city in sight, life speeds to its ending: preaching and penitence, alms and intercession have had their allotted season. Such is the final sentiment of the apocalyptic writer, after he has given his views of the Messianic Kingdom, of the fall of Rome, of the future world and other matters which press upon the mind of the God-fearing people.

And it is not difficult to see the period to which this lamentation belongs. He is a pious Jew of the time of the desertion of Zion; how long after the year A.D. 70 he lived and wrote is more difficult to decide, and indeed no one has handled this point with adequate clearness. We will indicate presently the chief opinions which have been held.

Not only is the writer a Jew, but he is a Palestine Jew,—a Jerusalem Jew, we may say with a good degree of confidence. He is acquainted with the Holy City and its surroundings. The imagined Baruch, for example, receives a word from the Lord (c. 21) 'to go and sit in the valley of the Kedron in a cave of the earth;' how did he know that the Kedron valley was full of caves? In c. 47 he says, "Lo! I am going to Hebron, for thither hath the strong Lord sent me;" he does not say, "I am going from Jerusalem to Hebron;" the city is taken for granted in the story. Add to this, that Hebron would hardly be known out of Palestine. The writer is a Jew, dwelling in the neighbourhood at least of the Holy City; we do not know how far the actual right of dwelling in the city or its environs was restricted at this time; it cannot have been completely forbidden, for that is a regulation which history shews and our later Baruch confirms to have been the result of the revolt of Bar-Cochba. We shall shew presently that the Christian Baruch was also written in the city or near it.

Returning to the question of the time when the Apocalyptic Baruch was written, we observe that those who have written on the subject have dealt with (1) its similarity to another, even more famous Apocalypse, the fourth book of Ezra; (2) the evidences of the influences of Christian Scriptures upon the writer;

(3) the actual notes of time which it contains; (4) the fact that it is quoted in the second century by Papias. For example: the connexion between fourth Ezra and the Apocalypse of Baruch, both in ideas and language, is undoubted. P. Hofstede de Groot in his work on Basilides¹ determines the date of the fourth book of Ezra to be A.D. 97 (reign of Nerva), and he decides, in agreement with Volkmar, that at this time the Gospel of John was either unwritten, or current only in a limited circle. Then in a note he remarks that shortly before 4th Ezra there appeared the Apocalypse of Baruch, a work originally written in Greek, but transmitted to us only in Syriac, which is later than the destruction of the temple, earlier than Papias, and has references to Matthew, Luke and Romans. And this Apocalypse he affirms to be the work of a Jew. De Groot's conclusions may be traversed, perhaps, on some points, and we are not concerned to defend them; the connexion, however, between Ps. Ezra and Apocal. Baruch which he remarks is recognized by other writers; and the only question is whether Apocal. Baruch or Ps. Ezra is the earlier.

Fritzsche on the other hand, in his account of the Apocryphal Books of the Old Testament (Lips. 1871), will have it that the Apocalypse is written not long after the fall of the city. This is a good deal earlier than De Groot's estimate. H. Ewald² argues the date something as follows in his review of the earlier numbers of Ceriani's *Monumenta*. He points out that in c. 28 the reckoning from the destruction of the city to the expected Messiah is 'two parts weeks of seven weeks,' which he interprets to mean, in accordance with Hebrew parlance, two-thirds of 49 years: thus bringing us to the year 103 ($70 + \frac{2}{3}49$). But then allowing for twelve periods of final tribulation through which the world must pass from the time when the book is written until the end of the age, he subtracts 12 years and so brings us back to the year 91. It will be evident that this process of calculation and sub-calculation is very uncertain; and the same thing must be said of Ewald's other chronological points.

It is interesting to find, by way of contrast, that Hilgenfeld puts the date as far back as A.D. 72³!

¹ *Basilides am Ausgange des Apostolischen Zeitalters*, Leipzig, 1868.

² *Gottingische gelehrte Anzeigen*, 1867, p. 1705 sqq.

³ *Messias Judaeorum*, p. lxiii.

It is a difficult thing then to determine the date with precision; and it does not seem that the critics have arrived at any more definite conclusion as to the upper time-limit of the book, than that it was written after the Roman Captivity. For the lower limit the only evidence (apart from that afforded by our Christian Baruch) seems to be that there is good reason to believe that it was from the Apocal. Baruch that Papias derived his Chiliastic story about the rate of produce of corn and wine in the millennium. The passage of Papias is well known by frequent quotation: that of Baruch is sufficiently like to it (x. 29). "In one vine there shall be a thousand shoots, and one shoot shall produce a thousand clusters, and one cluster a thousand berries, and one berry shall give a cor of wine.....And they shall eat (of the manna) who come to the end of that time." It must be admitted, however, that there are elements in Papias' story which do not seem to be reproduced here; so that even at the lower time-limit we are a little uncertain. Nor do we arrive at much greater certainty when we try to determine the date of the Apocal. Baruch by the companion volume, the 4th of Ezra. Ewald goes so far as almost to assume that the two books are twin sisters, and if either is earlier than the other it is Apocal. Baruch. But this again is very uncertain. What we do seem to have arrived at is that it is generally admitted that 4th Ezra and Apocal. Baruch are closely related; that Baruch shews some parallels with the Christian Gospels; that its time of production is in the last thirty years of the first century, and that there is some reason to believe it is quoted by Papias. It is unfortunate that we cannot speak with greater confidence, because, since the Christian Baruch as we shall see is exactly dated, we should have been able to get an estimate of the time between the publication of a Jewish Apocalypse and its appropriation by a Christian writer, which estimate might have served us as a rough guide in other and similar cases.

In addition to the three Baruch books to which we have been alluding (Apocryphal Baruch, or simply Baruch, Apocalyptic Baruch, and Christian Baruch) it is very likely that there are other Baruch and Jeremiah books which have perished. The titles Baruch and Jeremiah are interchangeable: our Christian book sometimes bears the name which we have adopted, *Rest of the words of Baruch*, and sometimes it is called the *Paralipomena of Jeremiah*. And it is probable that similar confusion has

prevailed with regard to the Baruchs and Jeremiahs which are not now extant, but of which we find traces.

For example, we find that it is to an apocryphal Jeremiah that Euthalius refers the quotation in Ephes. v. 14, "Awake thou that sleepest &c." Others, I believe, suppose it to be taken from an Apocryphal Adam. There is much confusion in these references to Apocryphal authors: but we may well imagine that the sentences come from some unrecovered part of the Baruch-Jeremiah literature, earlier of course than the Apocalypse.

An apocryphal Baruch is alluded to in Hippolytus¹, as being the text-book of a Gnostic named Justin. This Baruch is one of the superior angels, and not a prophet. Hippolytus gives a sketch of the system of Justin, and describes the oath which the initiated take that they will not divulge the mysteries nor relapse from the Good One to the creature: after which the worshipper is introduced to the secrets of the order, and beholds "what eye hath not seen and ear hath not heard, and which have not entered into the heart of man." This is the passage which Euthalius regards St Paul in 1 Cor. ii. as quoting, not from Isaiah, but from Apocryphal Elias. As it is one of the chief Gnostic formulæ in Justin's system, it is at least conceivable that Elias may be a mistake for Baruch.

In the *Altercation of Simon the Jew and Theophilus the Christian*², a work of the fifth century, to which Harnack has recently drawn attention³, there is an allusion to a book of Baruch, from which Theophilus quotes what he considers to be a convincing argument against Simon: "Quomodo ergo prope finem libri sui de nativitate eius et de habitu vestis et de passione eius et de resurrectione eius prophetavit dicens: Hic unctus meus, electus meus, vulvae incontaminatae iaculatus, natus et passus dicitur"? This is in answer to Simon's statement that "Baruch de Christo nihil meminit." The passage is not in any of our known books of Baruch.

In Cyprian's *Testimonia* iii. 29 there has been inserted in some MSS. a quotation from Baruch which has never been identified, as far as I know, in the known Baruch literature. It runs as follows: "Veniet enim tempus et quaeretis me vos et qui post

¹ *Philosophumena*, v. 24—27.

² *Texte und Untersuchungen*, Bd. i. Heft 3, Leipzig, 1883.

³ See Schürer, *Neutest. Zeitgeschichte*, iii. 83 (Eng. translation). Schürer's notes on the Baruch literature are very valuable.

vos cupiant audire verbum sapientiae et intellectus et non invenient. Nationes autem cupient videre sapientem et non continget eis; non quia deerit aut deficiet sapientia huius saeculi terrae sed neque deerit sermo legis saeculo. Erit enim sapientia in paucis vigilantibus et taciturnis et quietis sibi confabulantibus, quoniam quidam eos horrebunt et timebunt ut malos. Alii autem nec credent verbo legis Altissimi. Alii autem ore stupentes non credent, et credent et contradicentes erunt contrarii et impediētes spiritum veritatis. Alii autem erunt sapientes ad spiritum erroris, et pronuntiantes sicut Altissimi et Fortis dicta. Alii autem personales fidei: alii capaces et fortes in fide Altissimi et odibiles alieno." The passage is certainly in the Baruch manner, as we may see by comparing Apocal. Bar. c. 48, "Non enim multi sapientes reperientur illo tempore, et intelligentes singulares aliqui erunt: sed etiam qui sciunt, maxime conticescent.....et dicent multi multis illo tempore: Ubinam occultavit se multitudo intelligentiae?" But we can hardly identify it with any known passage: so we must still leave a margin for lost literature under the names of Baruch and Jeremiah.

We come now to our special subject, the Christian Baruch, a work which, as we said at the commencement, has met with a somewhat cold reception from the learned. Fritzsche describes it as much later in date and inferior in character to the Apocalypse of Baruch¹. De Groot speaks of it as belonging to the Gnostic school, whatever that may mean. Kneucker² calls it "a tasteless working over" of the Apocalypse of Baruch. Dillmann refers it to the third or fourth century, which can hardly be meant as a commendation. Schürer is more guarded, and simply says that it is "a Christian book akin to our Apocalypse of Baruch, and has borrowed largely from it." The question of the literary excellence of the work is of course quite a subordinate one; it is of more importance to know that it is admittedly and obviously a Christian book; and therefore not to be despised even if it should turn out to be of the third or fourth century. But the fact is, as we have said, it is much earlier, and its chronology is susceptible of exact determination.

¹ He expressed a hope of editing it, however, at some future time; a promise which he does not seem to have redeemed; 18 years having elapsed since the announcement.

² *Das Buch Baruch*, Lips. 1879, p. 195.

We will first of all shew that the book was written by a Judæo-Christian living in the city of Jerusalem. The action of the story, being concerned with the exile of the people, is divided between Jerusalem and Babylon; but the writer betrays himself by an excessive knowledge of the topography of the Holy City. Jeremiah wishes to send Abimelech the Ethiopian away from the city in order that he may not see the destruction thereof: and the Lord directs him to send him *to the gardens of Agrippa*, where he shall be hidden in the mountain side until the return of the people from exile. Accordingly Jeremiah directs Abimelech to take a basket and go to the garden of Agrippa *by the mountain road* and bring back figs. Abimelech goes, falls asleep under a tree, wakes after a sufficient sleep of 66 years, and coming back to the ruined city fails to recognize it. "Alas!" says he, "I have lost my way because I took the mountain road."

Now the mention of the garden of Agrippa would of itself be a sufficient betrayal of the locality of the writer, but when it is intimated that there were two roads thither, we are not only convinced that the writer was speaking of a spot well-known to him, but we are even encouraged to attempt an identification of the spot mentioned. It is very likely that the gardens of Herod alluded to are in the fertile valley below Solomon's pools, frequently spoken of by travellers and their guides as Solomon's gardens, and bearing to-day the name of Artas, which is an evident perversion of the Roman *hortus*. I know no more likely place for a royal garden in the vicinity of Jerusalem. And the curious thing is that there are decidedly two roads from Jerusalem to Artas; one the high-road to Bethlehem and Hebron, with a short divergence to the left at Solomon's pools; and the other the track round the hills which follows the line of Solomon's aqueduct from the pools to the city. It certainly looks as if the geography were real geography; and if this be the case the book was written in Jerusalem, as was its prototype the Apocalypse of Baruch. And in any case the allusion to the gardens of Agrippa remains whether we have correctly identified their position or not.

But we may go further than this: not only have we a geographical limit in the gardens of Agrippa, but we have also both superior and inferior chronological limits. Superior, by the fact that the book was written later than Agrippa whichever of the family may be intended; inferior, because it could not be written

after the time when his name ceased to be popularly attached to the place described. And it seems to me that this consideration alone would be fatal to Dillmann's hypothesis of the third or fourth century as the time of production of the book. The writer then is a Jerusalem Christian.

The next thing is to give the chronological identification. We have already alluded to this by anticipation. The word of the Lord to Jeremiah concerning Abimelech is that "I will cover him in the mountain *until I cause the people to return to the city.*" Now on the hypothesis, allegorical and cyclical, of a Babylonian captivity, the conventional duration of exile is 70 years. Yet the writer makes Abimelech fall asleep for 66 years. The Greek service-book corrects this to 70, and inserts the 70 again in the passage where Abimelech, meeting the old man outside of the city, obtains from him the information that Jeremiah is with the people in Babylon; where it adds the words 'since 70 years.' The correction was perfectly natural and every way likely: but we must read *sixty-six* years, and not seventy. The same exchange of numbers will be found in c. vi. where Abimelech shews his basket of figs, and remarks that, though sixty-six years had elapsed since they were gathered, they were not spoiled. And since this is the date of the suggested return from exile, and the book professes to be describing contemporary movements (for it records almost nothing of subsequent date), then the year of the expected return is A.D. 70 (the date of the Captivity) + 66 years = A.D. 136, and the book must have been written very soon after that time.

Very soon after; because, as we shall see, it is an Eirenicon addressed to the people of that time, a time marked perhaps more deeply than any other in the history both of Jews and Christians (unless perhaps it be the capture of the city by Titus), when severe political regulations produced greater changes in six months in the relations of the Church and Synagogue than had taken place in all the preceding years of the century. We know very little, as we would wish to know, of the details of the new settlement of Jewish affairs by Hadrian: but we learn from the history and the coins that Jerusalem was no more, that it was replaced by Aelia Capitolina; that the plough was passed over the sacred soil in token of its renewed subjugation; that Roman statues, the emperor and his gods, were in the holy places; and that an edict

of the emperor prohibited the Jew from approaching the holy city. Turning to the lists of bishops in Eusebius, we find that Gentile names appear now for the first time. It is not necessary to assume the accuracy of Eusebius' list of Jerusalem bishops; many of these lists, especially the earlier portions of them, are afterthoughts. But the tradition which makes Marcus bishop of Jerusalem at the close of the Hadrian War can hardly be incorrect. It means at least that there has been, from political necessity, a change in the organic life of the Church. The last have become first, and the first last. The Judæo-Christian party with its antique traditions and venerable Mosaism is passing away. The breach with Judaism, which Paul usually effected in a few months in any city where he laboured, was not really accomplished in Jerusalem until the false Messiah had run his course. But then when it came, it came quickly.

Now our document is the Church's Eirenicon to the Synagogue, at the time of the Hadrian edict. The problem is, how to evade the edict of banishment from the holy City which is pronounced on the race. Granted that we are carried away captive, and that there is a possibility of return from captivity, how is this return to be brought about? And the answer is contained in the letter which Baruch is instructed to send from Jerusalem to Jeremiah in Babylon. So we find in c. vi. as follows: "If ye obey my voice, saith the Lord, by the mouth of Jeremiah, I will separate you from Babylon; but he that will not obey, let him be as a *stranger to Jerusalem* (ξένος τῆς Ἱερουσαλήμ), and I will test you by the water of Jordan, and there he that will not obey will be made manifest." If nothing more had been said, we should have conjectured that this meant the rite of baptism; but lest we should have any doubt on the matter, the writer continues parenthetically, "this is the sign of the great seal," the conventional Patristic term for baptism. It is possible that these words may be a later interpolation, but they are not the less striking on that account, for they would disclose the interpretation that primitively attached to the passage. The meaning of it all is that the Christians, who are evidently not affected by the imperial edict, for they took no part in the rebellion, have suggested to Jews that by becoming Christians by the way of baptism they can evade the force of the edict, and no longer be *strangers to Jerusalem*. The people are to be brought down to Jordan's side from Babylon, and there the

precious and the vile are as far as possible to be separated one from another. Those that will make the necessary renunciation are received, the rest rejected. The story runs that Jeremiah sorted them out by families, and when a whole family was clear in renouncing Babylon and its customs they were accepted, and if not they were rejected. It is not easy to imagine the manner of the selection. The writer does not mean Rome when he speaks of the people renouncing Babylon and passing over Jordan, and talks of mixed families where men had married Babylonish women. I think he here means the old school of Jews (those who are Babylonians by choice and who make no move towards Jordan), between whom and the Gentile Church lies the conflict for the possession of the intermediate party, the Judæo-Christians of various types. The selection being made by families is thoroughly in the Eastern manner, where religion is always bounded by social and racial limits, just as population is to this day reckoned by households. "Himself believed and his house" is the conventional formula for a change of religion: "as for me and my house" is a similar term. What makes one a little more confident in this interpretation that it was an appeal on the part of the Gentile Christians or at least of the Gentilising Christians to the more conservative, half convinced among their Jewish brethren, is that we find from the account that some undecided people in the middle ground came part way to Jerusalem and then returned; and that on their returning to Babylon, they were received with an intimation that as they had secretly departed from them, they would not be received again: Babylon would have none of them. This according to the story leads to the formation of a new colony which is derisively called Samaria. Now this is not difficult of interpretation, if we imagine that there were those who had gone so far from Judaism as to provoke an edict against their being received again into ecclesiastical fellowship, and yet had not come so near to Christianity as to be able to pass the baptismal standards. In this case, then, one result of the Hadrian edict is the formation of a new Ebionite movement in Palestine. This exactly agrees with the statements of Epiphanius and Jerome as to the origin of Ebionism: they attempted to be both Jews and Christians, and ended by being neither.

It is just possible that this accepting and rejecting of families of Jews by unauthorized or half-authorized persons may be the

origin of a story in the Talmud which seems to cover some irritation of national feeling¹ on the subject of proselytism.

The story is apparently referred to the time of Rabbi Joshua who is talmudically the second generation from Hillel the Great.

“R. Joshua said, I received from R. Johanan ben Zakkai, who received it from his teacher as a tradition in a direct line from Moses on Mount Sinai, that Elias would not come to pronounce clean or unclean, *to reject or admit families* in general, but only to reject those that had entered by violence, and to admit those who had been rejected by violence. There was, beyond Jordan², a family of the name of Beth Zerefa, which a certain Ben Zion *had excluded by violence*. There was there another family (of impure blood) whom this Ben Zion had *admitted by violence*. He comes to pronounce such clean or unclean, to reject or to admit them.” It is quite possible that this story refers to the admission of proselytes by Jewish Christians of the city of Jerusalem (note the Ben Zion) who rank practically in the city as Jews, at all events up to the time of the final rupture, although in foreign cities they had long been known as a ‘third race.’

In Jerusalem itself the line of demarcation between Jews and Christians was for a long time very faintly marked. The ecclesia was *intra synagogam*. Witness the account of the relations between the Pharisees and S. James the Just which Hegesippus furnishes; no difference of opinion seems to exist, except on the one point of the person of Jesus Christ, whom St James affirms to be coming in the clouds of heaven. Something of the same sort is implied in the story of Stephen. We shall see by and bye that this is the very point which provokes the people in the story to stone Jeremiah, just as in the history they had done to St James.

We have shewn, then, that the date suggested by the Baruch-story is exactly the right date for the interpretation of the events that are there adumbrated. It is very interesting to see that baptism, which at first served to initiate proselytes into Judaism,

¹ Mishna *Edujoth*, viii. 7, quoted in Schürer *Neutest. Zeitgesch.* II. 156, Eng. trans.

² We must not strain allegory in order to see here a reference to baptism. I use the passage to shew that the Jews in the first century quarrelled over and discussed their family membership and its purity or impurity just as our Apocalypse shews them to be doing in the early part of the second century.

but which does not seem to have been applied to Jews of good standing, has now become one of the means for distinguishing the Jews from the proselytes, and that the baptized are baptizing the baptizers.

Before leaving the question of chronology, we must say a word or two about another time-note in the book. The people stone Jeremiah, and when dying he predicts the coming of Jesus Christ, the Son of God, after a lapse of four hundred and seventy-seven years¹. It is a little difficult to see what he means by these figures and how he arrives at them. It must be either that the Apocalypticist is giving the actual period from the first return from Exile to the Messiah, or he is fabricating a similar period for the second advent, the numbers being assumed to repeat as in the case of the duration of the Exile. That the former is the right interpretation may be gathered from the prediction which Jeremiah makes that the Messiah will choose to himself 12 apostles in order that they may preach the gospel amongst the Gentiles. (c. ix. 18.) But how does he calculate the period? For we have no possibility of deducing 477 years from the interval between Jeremiah's death and the birth of Christ. The building of the walls under Ezra and Nehemiah is, however, not very far from the time intimated; if we assume this to have taken place in 458 B.C. or thereabout we should not be 20 years out in the reckoning. But it would be idle to assume a great acquaintance with chronology on the part of our simple-minded Apocalypticist; and we might perhaps leave this part of the question unsettled without feeling that the interpretation would suffer. We will, however, venture one suggestion for clearing the matter up. At the close of the sixth book of Josephus' Jewish Wars will be found a table of the leading periods in the history of Jerusalem from conquest to conquest and captivity to captivity. Now in this list the time from David to the Babylonian exile is given as 477 years: so that it is just possible that the Apocalypticist made an error in taking a number from Josephus' tables.

We will now pass on to consider the literary debts of the Christian Baruch to his predecessors, beginning with some passages which are founded on the Apocalypse of Baruch.

Apocal. ii. Haec autem dixi tibi, ut dicas Jeremiae, et omnibus qui similes sunt vobis, ut recedatis ab urbe ista, quia opera vestra

¹ The MSS. are very confused over this number; the Ethiopic in particular fluctuating between 303, 330, and 333 *weeks*.

sunt urbi huic tanquam columna firma et preces vestrae tanquam murus validus.

This passage is imitated in the later Baruch as follows: c. i. 1, ἔξελθε ἐκ τῆς πόλεως ταύτης σὺ καὶ ὁ Βαρουχ.....αἱ γὰρ προσευχαὶ ὑμῶν ὡς στῦλος ἐδραῖός ἐστιν ἐν μέσῳ αὐτῆς καὶ ὡς τεῖχος ἀδαμάντινον περικυκλοῦν αὐτόν. (We are thus able to restore some parts of the original Greek of the Apocalypse of Baruch.)

The remote source of either sentence is to be sought in Jer. i. 18.

Apocal. vi. Et factum est crastino die, et ecce exercitus Chaldaeorum circumdedit urbem, et tempore vesperae reliqui populum ego Baruch et exivi et steti apud quercum: et contristabar super Sion et ingemiscebam super captivitatem quae supervenerat populo: et ecce subito spiritus fortitudinis sustulit me et extulit me supra Jerusalem in altum. et vidi et ecce quatuor angeli stantes super quatuor angulos urbis, tenentes unusquisque ex eis lampada ignis in manibus suis.

Compare with this the account by the later Baruch of the capture of the city, especially

iii. 2. Καὶ ἐγένετο φωνὴ σάλπιγγος, καὶ ἐξῆλθον ἄγγελοι ἐκ τοῦ οὐρανοῦ, κατέχοντες λαμπάδας ἐν ταῖς χερσὶν αὐτῶν, καὶ ἔστησαν ἐπὶ τὰ τεῖχη τῆς πόλεως.

The angels then in Bar. Apocal. wait until one of their number takes the holy vessels and delivers them to the earth, which opens her mouth and swallows them up. The Christian Baruch makes this hiding of the vessels to be done by Jeremiah and Baruch.

x. Dic Jeremiae ut vadat et confirmet captivitatem populi usque ad Babylonem; tu autem mane hic in vastitate Sion et ego ostendam tibi post hos dies quod futurum est ut contingat in fine dierum. et dixi Jeremiae sicut praecepit mihi Dominus. et ipse quidem ivit cum populo; ego autem Baruch reversus sum et sedi ante portas templi et lamentatus sum lamentationem istam super Sion et dixi.

The whole of these details are absorbed by the later Baruch, with the single exception of the mention of the 'gates of the temple.' Each writer makes Baruch the one that laments over the city.

A more striking case of absorption of the earlier story is the account of the priests throwing the keys of the Sanctuary up to heaven.

Apocal. x. Vos autem sacerdotes sumite claves sanctuarii et

proiците in altitudinem coeli et date eas Domino et dicite ; Custodi domum tuam tu : nos enim ecce inventi sumus oekonomi mendaces.

Bar. Christ. iv. 3. Ἱερεμίας δὲ ἄρας τὰς κλεῖδας τοῦ ναοῦ, ἐξῆλθεν ἔξω τῆς πόλεως καὶ ἔρριψεν αὐτὰς ἐνώπιον τοῦ ἡλίου, λέγων· Σοὶ λέγω, ἥλιε, λάβε τὰς κλεῖδας τοῦ ναοῦ τοῦ Θεοῦ, καὶ φύλαξον αὐτὰς ἕως ἡμέρας ἐν ᾗ ἐξετάσει σε Κύριος περὶ αὐτῶν. Διότι ἡμεῖς οὐχ εὐρέθημεν ἄξιοι τοῦ φυλάξαι αὐτὰς, ὅτι ἐπίτροποι ψεύδους ἐγενήθημεν.

The passage in *Apocal.* xi. Dicite mortuis : Beati vos magis quam nosmetipsi, qui vivi sumus, becomes in *Bar. Christ.* iv. 9 Μακάριοί εἰσιν Ἀβραὰμ Ἰσαὰκ καὶ Ἰακώβ, ὅτι ἐξῆλθον ἐκ τοῦ κόσμου τούτου.

It will be seen that the coincidences in the opening chapters of the two Apocalypses are very marked. The same coincidence is to be traced on referring to the closing chapters of the Apocalyptic Baruch. Baruch writes a letter to the nine and a half tribes who are in Babylon and sends it by means of an eagle.

Apocal. lxxvi. Accersivi aquilam et locutus sum ei verba ista : Te fecit Altissimus ut sis excelsior prae omnibus avibus : et nunc vade, neque commoreris in loco, neque ingrediaris nidum, neque consistas super quamvis arborem, donec transieris latitudinem aquarum multarum fluminis Euphratis, et ieris ad populum illum qui habitat ibi et proice ad eos epistolam hanc : recordare autem quod tempore diluvii a columba accepit Noe fructum olivae cum eam emisisset de arca ; sed et corvi ministrarunt Eliae deferentes ei cibum, sicut praeceptum erat eis ; etiam Salomon tempore regni sui quocumque volebat mittere, aut quaerere aliquid, avi praeicipiebat, et obediebat ei sicut praeicipiebat ei : et nunc ne taedeat te, neque declines ad dexteram aut ad sinistram, sed vola et vade via recta ut custodias mandatum Fortis sicut dixi tibi. (lxxvii.) Et fuit cum consummassem omnia verba epistolae huius et scripisssem eam cum cura usque ad finem eius et plicuissem eam et obsignassem eam diligenter et ligassem eam ad collum aquilae et dimisi et misi eam.

This is imitated in c. vii. of the Christian Baruch with no loss of force in the transcription :

Bar. Christ. vii. Σοὶ λέγω, βασιλεῦ τῶν πετεινῶν, ἄπελθε ἐν εἰρήνῃ μεθ' ὑγείας καὶ τὴν φάσιν ἔνεγκέ μοι. Μὴ ὁμοιωθῇς τῷ κόρακι ὃν ἐξαπέστειλε Νῶε, καὶ οὐκ ἀπέστραφη εἰς τὴν κιβωτόν·

ἀλλὰ ὁμοιώθητι τῇ περιστερᾷ ἥτις ἐκ τρίτου φάσιν ἤνεγκε τῷ δικαίῳ· οὕτω καὶ σὺ, ἄρον τὴν καλὴν φάσιν ταύτην τῷ Ἰερεμίᾳ, καὶ τοῖς σὺν αὐτῷ, ἵνα εὖ σοι γένηται, ἄρον τὴν χάρτην ταύτην τῷ λαῷ τῷ ἐκλεκτῷ τοῦ Θεοῦ. Ἐὰν κυκλώσωσί σε πάντα τὰ πετεινὰ τοῦ οὐρανοῦ, καὶ πάντες οἱ ἐχθροὶ τῆς ἀληθείας βουλόμενοι πολεμῆσαι μετὰ σοῦ, ἀγώνισαι· ὁ Κύριος δώῃ σοι δύναμιν. Καὶ μὴ ἐκκλίνῃς εἰς τὰ δεξιὰ ἢ ἀριστερὰ, ἀλλ' ὡς βέλος ὑπαγον ὀρθῶς οὕτως ἄπελθε κτέ.

These instances will be sufficient to shew the kind of use which the later Apocalypticist made of the earlier. And that the earlier form had attached to it the epistle of Baruch appears not only from the legend of the carrier-eagle but from the admission¹ at the close of the Christian Baruch that "the rest of the words of Jeremiah and all his might are written, not here, but in the epistle of Baruch."

The traces of the use of the beautiful Apocalypse, known as the fourth book of Ezra, are less marked, but they are decided. The famous passage in c. v. foretelling that "blood shall drop from wood *and the stone shall utter its voice*" was known to our Apocalypticist: it furnished him with the idea of the closing situation in his book; that in which Jeremiah sets up a stone, which takes his likeness, and deceives thereby the people who wish to kill him, until he has finished communicating the mysteries which he has seen to the crowd and his companions Baruch and Abimelech. The riotous folk stone the stone, thinking it to be Jeremiah. But at last the stone cries out with a human voice, "O foolish children of Israel, wherefore do ye stone me, thinking that I am Jeremiah?" The motive for this story is evidently the single sentence quoted above from Ezra². Another clause in the same connexion, where Ezra foretells amongst the signs of the end that "salt water shall be found in sweet water and friends be at war with one another," is copied by the Christian writer (c. ix. 16), "Snow shall become black and sweet waters salt."

The writer was also acquainted with the Apocryphal Isaiah. In c. ix. 18, 19 the text of our author runs as follows: "He shall come, and he shall come forth and he shall choose him twelve

¹ This may however be a later appendix.

² iv. Esd. v. 5. It is quite possible that the whole sentence is a confused allusion to the sawing asunder of Isaiah and the stoning of Jeremiah, and that Ezra himself may be drawing on legendary sources: but compare what is said on this point on pp. 43, 44.

apostles that they may preach the Gospel amongst the Gentiles: whom I beheld adorned by his Father and coming into the world on the mount of Olives; and he shall fill the hungry souls. While Jeremiah was saying these things concerning the Son of God, that he is coming into the world, the people was enraged, and said; These are the same words as were spoken by Isaiah the son of Amos, when he said, I beheld God and the son of God. Come then and let us kill him with a different death to that wherewith we killed Isaiah." The people are not alluding here immediately to the famous sixth chapter of Isaiah in which the prophet sees the Lord on his throne, or as the Targumists prefer to render it, so as to avoid the anthropomorphic conception, the glory of the Lord on his throne¹; but they are speaking of a prophecy or pseudo-prophecy in which the manner of his death seems also to have been recorded as well as his ecstasy. And this can hardly be anything else than the Ascension of Isaiah, in which Justin Martyr is supposed to have found his information about the sawing in twain of Isaiah with a wooden saw, and to which Origen definitely appealed as an authority for the manner of the prophet's martyrdom. We will not saw him asunder, they say, as Isaiah was martyred, but, for the sake of variety, we will stone him. It is, of course, possible that the writer might have based his fiction on mere traditions, but the reference to Jeremiah as seeing the coming of the Son of God and his sending forth of the twelve apostles to preach is conclusive in favour of the Ascension of Isaiah as the origin from which he drew. The reason why Isaiah is arrested is because "Berial was in great wrath against Isaiah on account of the vision and the revelation which Sammael had unveiled and because by him was seen the coming of the Beloved from the seventh heaven, and his transformation,...and the tortures wherewith the children of Israel would torture him, and the coming and the teaching of the twelve apostles..."² And that the writer had the actual book to refer to will appear from the use he has made of another detail of the Martyrdom of Isaiah. When the writer describes the tortures of the prophet and his final ascent in rapture through the seven heavens before his death, he makes the prophet fall into a death-like trance in which speech and breathing cease. And

¹ A conception which lies underneath the passage in the Gospel: "He saw his glory and spake of him," John xii. 41.

² *Ascensio Isaiæ*, ed. Dillmann, c. iii.

what Isaiah sees in that vision he tells afterwards to the king and the circle of the prophets. "While he was speaking by the Holy Ghost, in the hearing of all, he held his peace and his mind was rapt away and taken upward so that he saw not those that stood around; his eyes were open but his mouth was still and the mind of his body was rapt away upward, but his breath was in him, for he saw a vision." (I think that we should read here 'his breath was *not* in him.') The writer explains further that the "vision which he saw was not of this world, but of the world which is hidden from mortal eyes. And after Isaiah saw this vision, he narrated it to Hezekiah and Josab his son and the rest of the assembled prophets." All of this is imitated in our Christian Baruch: Jeremiah falls into a death-like trance, but after three days he revives, his soul revisits her tenement, and he tells the Glory of the Father and the Son. This use of Apocryphal Isaiah begins in the earlier part of the prophet's ecstasy (c. ix. 3) where he cries out "Holy, holy, holy...beyond the sweet voice of the two seraphim:" here the direct reference is to Isaiah vi., as is seen from the trisagion and the mention of two seraphim ("one cried unto another"), but that Ps. Isaiah is in mind with its full Christology appears from the insertion of the words "the true light that lighteneth me."

We need not hesitate to say then that the writer has used the Ascension of Isaiah, and used it too, for it is an interpolated Apocalypse, augmented and expanded by Christian hands, in its later and Christian form. The date of this work is discussed by Dillmann in his preface, and we need not dispute his conclusion in referring the book to the beginning of the second century¹.

We have thus determined three earlier Judæo-Christian works which have been used and imitated in the process of manufacture of the Christian Baruch. We will pass on to examine the possible use which the writer may have made of other traditions concerning Jeremiah, or, which is for our purpose the same thing, of lost books incorporating traditions.

That traditions concerning Jeremiah were widely circulated in early times appears from many considerations: the second book of the Maccabees, for instance, has the whole story of the hiding of the sacred vessels, in a form which does not agree with the Apo-

¹ *Ascensio*, p. xvi. Quibus omnibus perpensis Ascensionem iam primis secundi sæculi decenniis exstitisse censeo.

calyptic Baruch, and which is not in perfect harmony with the Christian Baruch. And its version professes to be that of official documents. "It is also found in the records that Jeremiah the prophet commanded them that were carried away to take some of the fire, as it hath been signified: and that the prophet on giving them the law charged them that were carried away not to forget the commandments of the Lord, and that they should not be led astray in their minds on seeing images of silver and gold with their ornaments. And with other such admonitions exhorted he them that the law should not depart from their heart. It is also contained in the writing that the prophet being warned of God commanded that the tabernacle and the ark should be brought along after him: and that he went forth into the mountain where Moses climbed up and saw the heritage of God. And Jeremiah on coming thither found a kind of cave-dwelling, and he carried in there the tabernacle and the ark and the altar of incense and closed up the door. And certain of those that followed him came up to mark the way and they could not find it. But when Jeremiah learned of it, he blamed them and said, The place shall be unknown until God gather his people again together, and become propitious. And then shall the Lord shew these things¹."

There is one point in which the later Baruch agrees better with this than the Apocalypse: it makes Jeremiah hide the vessels and not the angels. Possibly, therefore, the writer was under the influence of the Maccabean tradition, which need not be very early. The date of the second of Maccabees is, however, one of the unsolved problems.

Another very important tradition concerning Jeremiah is that he was stoned. This is not an original idea of the Christian Baruch. We find it in the Epistle to the Hebrews. The famous passage "they were stoned, they were sawn asunder, &c." is a summary of the sufferings of the worthies of Faith, and each statement is based on the history of some real person: it has always been known that "they were sawn asunder" referred to Isaiah, just as "stopped the mouths of lions" referred to Daniel, and "quenched the violence of fire" to the three Hebrew children; but it is not so generally felt that "they were stoned" belongs to Jeremiah.

¹ 2 Macc. ii.

Yet such is the case, as the Baruch-Jeremiah legends shew: and the Epistle to the Hebrews is therefore one of the early witnesses to the tradition. But whence was it derived? We may not easily reply, but it was from the same source in written or unwritten tradition that Christian Baruch derived his information.

There is other important evidence of the diffusion of the tradition. The place of burial of Jeremiah is still shewn in Jerusalem in a cave which passes by the name of Jeremiah's grotto. This grotto lies in the southern side of the conspicuous hill to the north of the city which is supposed by many persons to be the place called Calvary. On the north-west side of the same hill are the ruins of the early Church which commemorated the martyrdom of St Stephen who was said to have been stoned here. And it is said that this hill is the Tarpeian rock of ancient Jerusalem, the Beth-hassagelah or 'Place of Stoning' of the Talmud. It seems then that there is some connexion between the death which Jeremiah met, according to tradition, and the place where he is said to be buried. And the tradition concerning his stoning in Jerusalem must be early: for the uniform church tradition of *later* days, as we find it in the life of Jeremiah attributed falsely to Epiphanius, or the life that is given on his commemoration day in the Greek Church (see Menaeum for May 1), is that he was stoned indeed, but at Tahpanhes in Egypt, and not, as the Jerusalem tradition and the Christian Baruch say, in Jerusalem. Can we be wrong in affirming the antiquity of the tradition which we find in our authority? The opinion of the first and second centuries seems to be that Jeremiah was stoned in Jerusalem¹.

But did the traditions of our document centre round any actual person? Are Jeremiah and Baruch the background of the picture or the foreground? Do the historical features of the romance limit themselves to the City and the time of the Jewish expulsion and the baptismal suggestion of the Christians to the Jews: or may we go further? The writer has, according to some

¹ I do not forget that an attempt might have been made to bring the legends into harmony with our Lord's words "O Jerusalem which killest the prophets and *stonest* them that are sent unto thee;" but such a tendency would not have produced an earlier tradition but a later one. It is more reasonable, though the hypothesis is not necessary, and might even be fanciful, to understand our Lord as saying this in allusion to the legends. When he said it he was in view of the place of supposed martyrdom of Isaiah on the south of the city and of Jeremiah on the north.

MSS., changed 'Baruch the scribe' of the old Testament into 'Baruch the reader.' Does he mean a real official of the Church? It would be hard to say; but with Jeremiah the case is easier: for there is reason to believe that Judah, the last bishop of Jerusalem before the definitely Christian régime, died at the hands of the party of Barcochba. The Chronicon of Eusebius declares that many of the Christians suffered for not taking arms against Rome; and marks the close of the war by the arrival of the first Gentile Bishop. Now if Judah the supposed fifteenth bishop had outlived the war, he would certainly not have been exiled by the Romans: so he must have vacated his office by death.

A further interesting question arises with regard to the relations of our writer to the Christian records. We see him quoting freely and incorporating adroitly from many of the Judæo-Christian books which were current at that time in Palestine; Isaiah, Ezra, and Baruch—he knows them all. Baruch the Apocalypticist, whom he quotes most freely, though hardly to be called a Christian, has been affirmed by careful critics to be under the influence of the sentiments and to shew traces of the language of our Gospels. What of the Christian Baruch? Had he any acquaintance with the New Testament Scriptures? *There is some ground for believing that he was acquainted with the Gospel of John.* This will no doubt sound somewhat strange, but we will not prejudge the question by choosing for the time of production of the fourth gospel a period as *late* as is consistent with what has been hitherto known of the literature of the second century: there has been too much *à priori* reasoning in the dating of the fourth Gospel. Nor is the Nemesis which attaches to this arbitrary and *ex silentio* criticism exhausted. Neither will we on the other hand over-emphasise coincidences of thought and expression between our writer and the Gospel; although it might be possible to argue that when a writer (ix. 13) calls Jesus Christ the light of all the ages, the unquenchable lamp, the life of the faith, it is natural to refer to the Light of the World, the Light of Men and the Light of Life, and to the contrast which Christ makes between himself and John the Baptist, when he calls him the lamp *which has been kindled* and shines. We might point out also that the conjunction of $\phi\omega\varsigma$ and $\zeta\omega\eta$ is frequently recognized as not merely Christian, but Johannine. M. Clermont-Ganneau has established a number of cases of the occurrence of $\phi\omega\varsigma + \zeta\omega\eta$ as a

Christian formula in Syria. The two words are often arranged crosswise, thus $\overset{Z}{\phi} \underset{H}{\omega} c$; and M. Ganneau says we must seek the origin of the formula in the Gospel of John¹. And with less judgment it would be possible to quote the words (ix. 18) ἐρχόμενον εἰς τὸν κόσμον as a reminiscence of John i. 9, the interpretation of which is however doubtful. As none of these coincidences would definitely convince me of a quotation from John, so neither do I unduly desire to convince any one by them; but I would draw attention to one clause in the adoration of Jeremiah (ix. 3) where he addresses the Lord as τὸ φῶς τὸ ἀληθινὸν τὸ φωτίζον με, the true Light that lighteneth me: where the collocation of words is so peculiar, that it is almost impossible to refer the language to any other than St John, and in view of this fact the previous coincidences acquire new force. Further the passage is found, not only in the Greek, which exhibits at many points a text that has undergone some correction, but in the Ethiopic version, which often approaches very nearly, as we shall see, to the original form of the Apocalypse. Unless then it can be shewn that these words are a later addition, in the Ethiopic as well as in the Greek, we must admit a quotation from the fourth Gospel, which quotation happily allows of being dated in or about the year 136 A.D.

Authorities for the Text.

In the year 1866 Dillmann published the Ethiopic version of the Christian Baruch from several MSS.; and in the preface to the Ethiopic Chrestomathy², in which the text appeared, he pointed out that it was a regular part of the Ethiopic Bible, where it appears along with the Book of Baruch, the Lamentations of Jeremiah, and the Epistle of Jeremiah³. The Ethiopic version is translated from the Greek, and becomes a very important witness for the text. I follow, in my ignorance of Ethiopic, the best translations I can get of Dillmann's text; good ones fortunately are not lacking. There is a German translation by Prätorius in Hilgenfeld's *Zeitschrift für wissenschaftliche Theologie* 1872, p. 230—247: and a later revised translation with notes by König in *Theologische*

¹ *Archéologie Orientale*, p. 171.

² Lips. 1866.

³ Cf. Wright, *Cat. of Ethiopic MSS. in the British Museum*; Codd. 7, 8, 14, 16, 20.

Studien und Kritiken for 1877, pp. 318—338. I cite the evidence of this version as *aeth.*

The Menaea for Nov. 4th are a direct authority for the Greek text, which they contain in a somewhat abbreviated form, and in a less pure text. For example the Menaeum printed at Venice in 1843 gives the first five chapters only of the text. The whole of the text, according to Ceriani, is found in the Menaeum printed at Venice in 1609. Ceriani quotes occasionally a MS. Menaeum of the Ambrosian Library; and no doubt the evidence of this class of documents might be multiplied a hundredfold. Their combined evidence is given as *men.*

To this Ceriani added a MS. (marked AF. ix. 31) of the fifteenth century, which he describes as belonging to the Bibliotheca Regia Braidensis; which I take to represent the convent library of the Italian town of Bra in Piedmont. From this MS., with the aid of the Menaeum, Ceriani published the text which appears in the fifth volume of his *Monumenta Sacra* pp. 11—18. This MS. I call *a.*

To these authorities we may add the following from the library of the Patriarchate of Jerusalem.

Cod. *b* = Cod. 34, of the S. Sepulchre portion of the Library, of the eleventh century, containing the Ἑρωτήσεις καὶ Ἀποκρίσεις of Anastasius the Sinaite. At the end there are a number of questions concerning the dissonances of the Evangelists *de resurrectione Christi*: a fragment from Irenæus, the same as is printed in Tischendorf's *Anecdota Sacra et Profana* p. 120 from Cod. Coislin. 120; and on f. 251, at the end of the life of Jeremiah the prophet, comes the title τὰ παραλειπόμενα Ἱερεμίου τοῦ προφητοῦ.

Cod. *c* = Cod. 6 S. Sepulcri of the tenth century has been collated with the foregoing. It contains a valuable text which often deviates widely from that of the foregoing MS. The text begins on f. 242 of the MS.

The next two manuscripts belong to a totally different recension; but they are related *inter se*: the text which they give is an epitome of the Paralipomena, probably taken from the Menaea with appendices from collateral sources: they are as follows:

Cod. *d* = Cod. 66 S. Sep. a late MS. (15th cent.?) containing a collection of apocryphal matters of all kinds: a brief summary may be useful. It begins with an extract from Chrysostom, followed by

f. 6 b. Τοῦ ἁγίου ἀποστόλου καὶ εὐαγγελιστοῦ Ἰωάννου τοῦ

θεολόγου λόγος περὶ τῆς κοιμήσεως τῆς ὑπερευλογημένης καὶ ἐνδόξου δεσποίνης ἡμῶν θεοτόκου καὶ ἀειπαρθένου Μαρίας.

f. 14. Τῆς σεβασμίας μεταστάσεως τῆς ὑπερενδόξου δεσποίνης ἡμῶν καὶ ἀειπαρθένου.

f. 23. Περίοδοι τοῦ ἁγίου καὶ ἐνδόξου ἀποστόλου καὶ εὐαγγελιστοῦ παρθένου ἐπιστηθίου φίλου Ἰωάννου τοῦ θεολόγου.

f. 93 b. Πράξεις τοῦ ἁγίου καὶ ἐνδόξου καὶ πανευφήμου ἀποστόλου Θωμᾶ.

f. 109 b. Ἐκ τῶν περιόδων τοῦ ἁγίου καὶ ἐνδόξου ἀποστόλου Φιλίππου. ὑπὸ (l. ἀπὸ) πράξεως πέντε καὶ δεκάτου μέχρι τέλους τοῦ μαρτυρίου αὐτοῦ.

f. 124. Πράξεις Μαθθία καὶ Ἀνδρέα ἐν τῇ χώρᾳ τῶν ἀνθρωποφάγων.

f. 146 b. Πράξεις τῶν ἀποστόλων Πέτρου καὶ Παύλου καὶ πῶς ἐν Ῥώμῃ ἐμαρτύρησαν ἐπὶ Νέρωνος.

f. 165. Μαρτύριον τοῦ ἁγίου ἀποστόλου καὶ εὐαγγελιστοῦ Μάρκου.

f. 169 b. Τοῦ ἁγίου ἀποστόλου καὶ εὐαγγελιστοῦ Λουκᾶ.

f. 177. Ὑπόμνησις εἰς τὸν ἅγιον ἀπόστολον καὶ εὐαγγελιστὴν Ματθαῖον.

f. 181 b. Τοῦ ἁγίου ἐνδόξου ἀποστόλου Ἰακώβου ἀδελφοῦ τοῦ ἁγίου Ἰωάννου τοῦ θεολόγου.

f. 182. Διήγησις περὶ τῆς ἀντιλογίας τοῦ διαβόλου μετὰ τοῦ κυρίου ἡμῶν Ἰησοῦ Χριστοῦ.

f. 186. Βίος σύντομος καὶ πολιτεία τοῦ ὁσίου πατρὸς ἡμῶν Ἰωάννου τοῦ ἐν τῷ φρέατι.

f. 188 b. Βίος τοῦ ἁγίου Γερασίμου.

f. 190 b. Διήγησις Μάλχου μοναχοῦ.

f. 194. Διήγησις περὶ...Νικολάου.

f. 196. Μαρτύριον Μενίγνου (sic).

f. 199. Ἀθλησις...Θεοδώρου.

f. 202 b. Μαρτύριον Φωτείνου.

f. 209 b. Διήγησις...ἐν τῷ βίῳ...Παχωμίου.

f. 212 b. Διήγησις περὶ τοῦ θρήνου τοῦ προφήτου Ἰερεμίας περὶ τῆς Ἱερουσαλήμ. καὶ περὶ τῆς ἀλώσεως ταύτης καὶ περὶ τῆς ἐκστάσεως Ἀβιμέλεχ. εὐλόγησον δέσποτα.

A life of Jeremiah is prefixed to the text of the Paralipomena.

f. 215. περὶ τῆς ἀλώσεως Ἱερουσαλήμ· τὰ λαληθέντα ὑπὸ κυρίου πρὸς Ἰερεμίαν· καὶ ὅπως ἡ αἰχμαλωσία γέγονεν ἔχει οὕτως.

f. 222 b. Ὅπτασία Κοσμᾶ μοναχοῦ.

f. 229. Διήγησις ἐτέρας ὀπτασίας.

f. 231 b. Διήγησις περὶ τοῦ γενομένου θαύματος ἐν Ἀφρική
[ἐν] τῇ πόλει Καρταγένῃ.

f. 233. Ἐφραίμ· εἰς τὸν πάγκαλον Ἰωσήφ.

f. 252. Χρυσοστόμου· εἰς τὸν μάταιον βίον.

f. 260. Διήγησις καὶ διαθήκη τοῦ δικαίου καὶ πατριάρχου
Ἀβραάμ· δηλοῖ δὲ καὶ τὴν πείραν τοῦ θανάτου αὐτοῦ. εὐλόγησον
δέσποτα.

It will be seen that the MS. though late contains a great deal of valuable apocryphal matter: for example, I found it worth while when working at Jerusalem to copy the whole of the Ἀντιλογία τοῦ διαβόλου and the Διαθήκη Ἀβραάμ, as well as the Baruch matter.

The title attached to the Baruch extracts seems to imply that they were taken from a Menaeum.

Cod. *e* = Cod. 35 S. Crucis (the library of the Convent of the Holy Cross now removed to the Patriarchal Library at Jerusalem). This is also a late paper MS. (xvth cent.) and contains a similar text of the Paralipomena to the preceding. It contains also the prefixed life of Jeremiah. The MS. opens with a διήγησις Ἰακώβου εἰς τὸ γενέσιον τῆς θεοτόκου. We have collated the Baruch text with Cod. *d*.

We have thus the following authorities for the text:

aeth = Ethiopic version as edited by Dillmann.

men = The Menaea.

a = Cod. Braidensis.

b = Cod. 34 S. Sepulcri.

c = Cod. 6 S. Sepulcri.

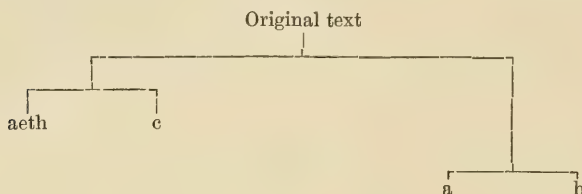
d = Cod. 66 S. Sepulcri.

e = Cod. 35 S. Crucis.

In using these authorities, we find that *d* and *e* are only transcripts, with occasional modifications, from the Menaeum; and a very little examination will shew that the text of the Menaeum is only a secondary authority. Of the remaining MSS., *a* and *b* present an almost identical text, and constitute together a single authority. The text is thus reduced to three principal authorities, which vary widely *inter se* from time to time; viz. *aeth*, *a + b*, and *c*. In comparing the readings we shall find that the Ethiopic text

is on the whole much superior to the text of *a, b*; and that where it diverges from this, it almost always has *c* associated with it¹.

We should thus be led to take generally the consensus of *aeth* and *c* as furnishing the earliest reading; but this would require, first, that there should be a margin left for occasional cases in which *a, b* may have preserved the right reading; and second, that the consensus of *a, b* with either of the pair *aeth* and *c* against the other should be regarded as, almost to a certainty, the primitive reading. The MSS. would thus be represented by



The scheme will test itself readily as we edit the text; but a few instances may perhaps be taken to shew the relation of the authorities and the generally corrupt state of transcription.

v. 23. *a.* εἰ μὴ ἦς πρεσβύτης, καὶ ὅτι οὐκ ἐξὸν ἀνθρώπῳ Θεοῦ ὑβρίσαι τὸν μείζονα αὐτοῦ· ἐπεὶ κατεγέλων ὅτι μαίνη.

b. εἰ μὴ εἰς πρεσβύτης· καὶ ὅτι οὐκ ἐξὸν ἀνθρώπῳ Θεοῦ ὑβρίσαι τὸν μείζονα αὐτοῦ· ἐπεὶ καταγέλων σου καὶ ἔλεγον ὅτι μένει.

c. εἰ μὴ εἰς πρεσβύτης· καὶ οὐκ ἐξὸν ἀνθρώπων ὑβρίσαι τὸν μείζονα αὐτοῦ· ἐπικατεγέλουν σοι καὶ ἔλεγον ὅτι μὲν [ἡχμαλώ-
τευσον κτέ].

aeth. Wenn du nicht ein bejahrter Mann wärest, so würde ich dich schmähen und über dich lachen, doch nicht soll es geschehen, dass man einen Menschen verachtet, und zwar einen bejahrten Mann; und wenn du nicht ein solcher wärest, so würde ich sagen, dass du ausser dir bist.

Comparing these readings we see that the Θεοῦ is to be rejected in *a, b*: while the consensus of *b, c* and the Ethiopic makes it certain that the word ἐπικατεγέλων was followed more or less

¹ The superiority of the Ethiopic text is affirmed also by König (*Stud. u. Krit.* 1877, p. 319): "In der That hat mir eine durchgängige Vergleichung beider Texte gezeigt, dass beide weit von einander abweichen, ja dass der äthiopische dem Originale der Schrift näher als der bis jetzt veröffentlichte griechische Text steht."

closely by καὶ ἔλεγον; while the similarity of the endings ἐγέλων and ἔλεγον is sufficient reason for the omission of a clause. Nor can we be far wrong if, restoring the particle ἄν from the Menæa, we read ἐπικατεγέλων ἄν σοι καὶ ἔλεγον ὅτι μαίνη.

vi. 22. a. ὁ ἀκούων, ἀφορίσω αὐτὸν ἐκ τῆς Βαβυλῶνος, ὁ δὲ μὴ ἀκούων, ξένος γίνεταί τῆς Ἱερουσαλήμ.

b. ὁ ἀκούων, κτέ.....
.....γενήσεται κτέ.....

c. ὁ ἀκούων ἀναφέρω αὐτὸν ἐκ τοῦ λάκκου τῆς Βαβυλῶνος· ὁ δὲ μὴ ἀκούων ξένος γίνεταί τῆς Ἱερουσαλήμ καὶ τῆς Βαβυλῶνος.

aeth. Diejenigen, welche (auf sie) gehört haben, werde ich aus Babylon ausführen und sie werden nicht verbannt von Jerusalem in Babylon sein.

The chief point here is the addition of the words 'and from Babylon' by Cod. c: they evidently stood in the Ethiopic archetype but being unintelligible they were corrected to 'in Babylon.'

Thus we have the consensus of c and aeth for an apparently unintelligible reading: but the story explains it, as we proceed, for those who will not obey Jeremiah are not only refused admission to Jerusalem, but they are rejected also on their attempt to return to Babylon. So that the clause is a genuine one.

vii. 12. a, b. ἐὰν κυκλώσουσί σε πάντα τὰ πετεινὰ τοῦ οὐρανοῦ καὶ βούλωνται πολεμῆσαι μετὰ σοῦ, ἀγώνισαι· (b ἀγώνησαι).

c. ἐὰν κυκλώσωσίν σε πάντα τὰ πετεινὰ τοῦ οὐρανοῦ, καὶ πάντες οἱ ἐχθροὶ τῆς ἀληθείας βουλόμενοι πολεμῆσαι μετὰ σοῦ, ἀγώνισαι.

The missing clause being found also in the Ethiopic, we are entitled to restore it to the text.

There are some places, however, in which the text is extremely obscure in all authorities: and we may even be obliged to resort to conjecture for a reading. For example:

iv. 10. a, b. ταῦτα εἰπὼν Βαροὺχ, ἐξῆλθεν ἔξω τῆς πόλεως, κλαίων καὶ λέγων, "Ὅτι διὰ σέ, Ἱερουσαλήμ, ἐξῆλθον ἀπὸ σοῦ.

c. ταῦτα εἰπὼν, ἐξῆλθεν κλαίων καὶ λέγων, "Ὅτι λοιποῦ διὰ σέ, Ἱερουσαλήμ· καὶ ἐξῆλθεν ἐκ τῆς πόλεως.

aeth. Und nachdem er dieses geredet hat, ging er weinend hinaus.

Here the Ethiopic has cut the knot of a difficult passage by the simple process of omission of a clause and a, b by the omission

of a word: we may suggest the reading "Ὅτι λυπούμενος διὰ σέ, Ἱερουσαλὴμ, ἐξῆλθον ἀπὸ σοῦ. This furnishes the necessary material for the explanation of the variants.

vi. 16. *a, b.* Ἀποστείλας δὲ εἰς τὴν διασπορὰν τῶν ἐθνῶν, ἤνεγκεν χάρτην καὶ μέλανα καὶ ἔγραψεν ἐπιστολήν.

c. ὁ δὲ Βαροὺχ ἀπέστειλεν εἰς τὴν ἀγορὰν (sic!) τῶν ἐθνῶν καὶ ἤνεγκεν χάρτην καὶ μέλαν καὶ ἔγραψεν ἐπιστολήν.

aeth. Und Baruch geleitete ihn bis zur Strasse und holte Papier und Tinte und schrieb.

The Ethiopic text shews that *διασπορὰ* is a corruption: for it gives *Strasse* which is equivalent in Eastern language to *ἀγορά*: (e.g. *Sûk* in Arabic is either *street* or *market*; and this interchangeability of the two words has given rise to variant and conflate readings in the New Testament in Mark vi. 56 *ἐν ταῖς ἀγοραῖς καὶ ἐν ταῖς πλατείαις*;) so that we may safely read *ἀγορά*: but *ἀγορὰ τῶν ἐθνῶν* is more difficult: yet the *τῶν ἐθνῶν* cannot be omitted since it is found in *c* as well as in *a, b*. Let us see, then, whether there are any considerations that will throw light on this difficult reading. Is there any market that might be called the Gentiles' market; or any street that might bear the name of the Gentiles' street? This question brings before us some very interesting matter. We may establish the following points: (*α*) that there was a famous fair held annually at Abraham's oak near Hebron; (*β*) that this was especially a fair of the Gentiles; (*γ*) that this fair is closely connected in history with the Jewish war under Hadrian; and (*δ*) that the introduction of the city Hebron, and the terebinth of Abraham, into the story was suggested to the writer by the earlier Baruch whom he so largely draws upon in other details. And first, with regard to the fair: Sozomen in his Ecclesiastical History devotes a chapter to the account of the religious disorders that prevailed at this fair, and to the suppression by Constantine of the forms of idolatry that had associated themselves with it. At this Terebinth, says he, there assemble annually the inhabitants of the country and the remoter parts of Palestine, and the Phœnicians and the Arabians, during the summer season to keep a feast, and very many resort thither for the sake of trade, both buyers and sellers. The feast is diligently frequented by all nations, by the Jews because they boast of their descent from Abraham; by the Greeks because angels there appeared to men, and by

Christians. On this famous spot Constantine ordered the erection of a Christian Church¹.

This concourse of the Gentiles at the Terebinth-fair appears also from the *Onomasticon* of Eusebius, who says that the oak and sepulchre of Abraham are an object of religious veneration *πρὸς τῶν ἐχθρῶν*, where Reland long ago² saw that we must correct *ἐχθρῶν* into *ἐθνῶν*, as Lagarde has done in his edition of the *Onomasticon*³.

Sozomen, indeed, speaks of the Jews as frequenting the fair, but there is evidence to set against this statement, according to Jerome⁴, who says that "exsecrabile fuisse Judæis mercatum celeberrimum visere." We may, therefore, call this annual gathering a market of the Gentiles, in agreement with our text of Baruch.

The reason of the detestation which the Jews felt for this fair will be found according to Jerome in the consideration of the connexion between the fair and the Hadrian War. Many thousands of men had been sold at this market, after the capture of Bether, the last stronghold of the Jews, some of them at miserable rates, such as the price of a horse's feed of corn. Thus Jerome says, "quod ultima captivitate sub Hadriano, quando et urbs Jerusalem subversa est, innumerabilis populus diversae aetatis et utriusque sexus in mercato Terebinthi venundatus sit. Et idcirco exsecrabile etc.," and again in his Commentary on Zechariah⁵, "legamus veteres historias et traditiones plangentium Judaeorum, quod in tabernaculo Abrahae, ubi nunc per annos singulos mercatus celeberrimus exercetur, post ultimam eversio-nem quem sustinuerant ab Hadriano multa hominum millia venundata sint et quae vendi non potuerint translata in Aegyptum." It is clear, therefore, that the market, however famous, and widely attended, could never have been popular with the Jews. It has even been questioned whether in the time subsequent to the war, they were not disqualified by edict from

¹ Sozomen *H. E.* ii. 4, ἐν ταῦθα δὲ λαμπρὰν εἰσέτι νῦν ἐτήσιον πανήγυριν ἀγούσιν ὥρᾳ θέρους οἱ ἐπιχωρίοι, καὶ οἱ προσωτέρῳ Παλαιστινοί, καὶ Φοίνικες καὶ Ἀράβιοι. Συναίσι δὲ πλείστοι καὶ ἐμπορείας ἕνεκα, πωλῆσοντες καὶ ἀγοράσοντες.

² Reland, *Palestina* pp. 711 sqq. *sub voce* Chebron.

³ Ἡ δρὺς Ἀβραὰμ καὶ τὸ μνήμα αὐτοῦ θεωρεῖται καὶ θρησκέυεται ἐπιφανῶς πρὸς τῶν ἐχθρῶν. Cf. Jerome, *De situ et nominibus*, *sub voce* Arboe, A cunctis in circuitu gentibus terebinthi locus superstitione colitur.

⁴ Jerome, *Comm. in Jer.* xxxi. 15.

⁵ Jerome, *Comm. in Zach.* xi. 4, 5.

coming as near to Jerusalem as Hebron; some persons maintain that they were absolutely exiled from the soil of Palestine; but in any case we can see clearly that the market was a foreigners' market, and that it was closely connected historically with Hadrian's victories. Indeed it is quite possible that Hadrian established the fair. Something of the kind seems to be implied in the statement of the Paschal Chronicle, which under the date 119 A.D. (!) reports as follows: Ἦλθεν Ἀδριανὸς εἰς Ἱεροσόλυμα καὶ ἔλαβεν τοὺς Ἰουδαίους αἰχμαλώτους, καὶ ἀπελθὼν εἰς τὴν λεγομένην Τερέβινθον προέστησεν πανήγυριν καὶ πέπρακεν αὐτοὺς εἰς ταγὴν ἵππου ἑκαστον, καὶ τοὺς ὑπολειφθέντας ἔλαβεν εἰς Γάζαν καὶ ἐκεῖ ἔστησεν πανήγυριν καὶ ἐπώλησεν αὐτούς. καὶ ἕως τοῦ νῦν ἡ πανήγυρις ἐκείνη λέγεται Ἀδριανή.

There is here some confusion of dates, and it is also a question whether Hadrian visited Palestine himself or whether he merely established the fairs at the Terebinth and at Gaza by military authority; there is, however, reason for believing that the time of Hadrian is the time to which we must refer the establishment of these annual gatherings.

It appears then that we may put in a good claim for the identification of the Gentiles' market, and for the justification of the difficult reading of our best manuscript.

Nor need we be at all surprised at the allusion to Hebron in the story: for in the Apocalypse of Baruch, which our writer follows, we find the very same thing. Baruch goes to Hebron in search of a theophany or at least of an angelophany. It is the proper place to look for heavenly visitants¹. Our Ethiopic Version, if we could accept its reading, would make the Christian Baruch

¹ The parallelism between the two writers may be seen by placing the passages side by side:

Apoc. Bar.
xxi. 1. Et abii inde et sedi in Valle Cedron in caverna terrae.

xlvi. Et cum exissem ac dimissem eos, abii inde et dixi eis; Ecce ego vado usque ad Hebron: illuc enim misit me Fortis.

lxxvii. 18. Et fuit prima et vigesima mense octavo veni ego Baruch et sedi subtus quercum in umbra ramorum (? is this the Terebinth)...et scripsi has duas epistolas.

Bar. Christ.
iv. 11. καὶ ἔμεινεν ἐν μνημείῳ καθεζόμενος.

vi. 16. ὁ δὲ Βαροὺχ ἀποστείλας εἰς τὴν ἀγορὰν τῶν ἔθνων ἤνεγκε χάρτην καὶ μέλανα καὶ ἔγραψεν ἐπιστολήν.

also go to Hebron, as the proper place to finish the interview with the angel. This would bring the two Apocalypses into even closer relation: but we need not assume this. If our supposition be correct that the book belongs to the close of the Hadrian War, it is certain that the thoughts of the writer must have turned to the market where the Jews were sold into slavery; and conversely, if we have properly identified the Gentiles' market, the argument is in favour of referring the book to the time of Hadrian as the most likely period for an allusion to the Terebinth.

These instances, then, will perhaps suffice to shew the nature of the text with which we are dealing. It need scarcely be remarked that a host of insignificant itacisms and cases of corrupt transcription have been neglected. The chapters and verses are taken from the text of Ceriani.

Note on the Geography of Ezra and Baruch.

As we study the parallels between this pair of Apocalypses, or between any pair of the triad, 4 Ezra, Apocal. Baruch, Bar. Christ., we derive great advantage for the interpretation of the three texts. It is a great gain, for instance, to see how much, in each case, depends on a proper knowledge of the suburbs of Jerusalem and the country between that city and Hebron. We will take the matter a little further and try to apply our results to a problem that has been hitherto unsolved. Let us ask ourselves the question whether it is possible to identify the field of Arphad or Ardath mentioned in the 4th book of Ezra as the locality of one of the visions of that Apocalypse. The passage runs "ibis in campum florum ubi domus non est aedificata, et manduces solummodo de floribus campi.....et profectus sum, sicut dixit mihi, in campum qui vocatur Arphad et sedi ibi in floribus" (iv. Esd. ix. 24—26). The MSS. are, as might be expected, in the greatest confusion over this Ardath: the Latin texts reading Ardath, Ardat, Ardoch, or Ardach, which are evidently modifications of a primitive Ardat, or Ardath; the Arabic reads Araat, the Armenian Ardab; while the Syriac and Ethiopic agree in reading Arphad, and the weight of their combined testimony is so great that it is the accepted reading in Fritzsche's text. On the other hand the Arabic reading is very close, when written in uncial Greek, to the Latin reading; nor is the Armenian very far

from it. The question being insoluble from the MSS. alone, we turn to the known relations between the group of Apocalypses mentioned above: the first thought that suggests itself is that perhaps the field in question may be the field of Agrippa mentioned in Christian Baruch. The two names are not so remote as to render identification impossible, and if we imagine the γ to drop out we can come very near to the Arphad of the Syriac version. But perhaps this assumption is a little too difficult, and so we will try another and easier one.

Observing the fact that Hebron is mentioned in Apocal. Baruch as one of the seats of prophetic inspiration, and that Hebron is also implied in the Christian Baruch, we ask ourselves whether it is mentioned in 4 Ezra. Now if we turn to the Apocalypse of Baruch, we find that the vision at Hebron is preceded by a seven days' fast, and that before the prophet begins his fast or sets out for Hebron he bids farewell to the people and their elders who are extremely unwilling that he should depart from amongst them. The parallel to this passage in 4 Ezra is in c. xii. v. 40—51; as we may see from the following:

Apocal. Bar.

c. xlvi. Et responderunt filius meus et seniores populi et dixerunt mihi: Usque ad istiusmodi humiliavit nos Fortis, ut recipiat te a nobis cito et vere erimus in tenebris, &c. &c.

c. xlvii. Et cum exissem ac dimissem eos abii inde et dixi eis; Ecce ego vado usque ad Hebron...et veni ad eum locum ubi sermo factus fuerat ad me et sedi ibi et ieiunavi septem diebus, et factum est post dies septem....

4 Esdras.

c. xii. 40. Et factum est cum audisset omnis populus quoniam pertransierunt septem dies et ego non fuisset reversus in civitatem et congregant se omnis a minimo usque ad maximum et venit ad me et dixerunt mihi dicentes,

41. Quid peccavimus tibi et quid iniuste egimus in te...tu enim nobis superasti... sicut lucerna in loco obscuro.

50. Et profectus est populus sicut dixi ei in civitatem: ego autem sedi in campo septem diebus sicut mihi mandavit et manducavi de floribus, &c. Et factum est post dies septem....

We suspect, then, that the place of the fifth vision of Ezra (the vision of the great Eagle) may be taken to be Hebron; but a glance at the text will shew that the scene is the same as in the fourth vision (the vision of the Sorrowing Woman): and this scene is the field of Arphad, or Ardath, or whatever may be its right name. It seems, therefore, that Hebron as a place for visions turns up in all three Apocalypses, and that Ardath is in

its neighbourhood. With some likelihood we may say further that the oak of Abraham as a place for celestial communications turns up in all three writings: in the Christian Baruch by implication in the allusion to the Gentiles' market or fair at the Terebinth; and in the Apocalypse of Baruch the oak is suggested in the parallel passage to this, quoted in a previous note (Apocal. Bar. c. lxxvii. 18)¹. But it is also in Ezra, for we find in c. xiii. 57, "Et profectus sum et transii in campum (sc. Ardath)...et sedi ibi tribus diebus. (c. xiv.) Et factum est tertio die, et ego sedebam sub quercu (sc. Terebintho)."

Now observe further that the place of vision is described in Ezra as "campum...ubi domus non est aedificata," and compare the description which Sozomen gives of the sacred oak and its surroundings. "The place is open and cultivated ground, nor are there any buildings except the well and the ancient Abrahamic buildings around the oak" (*αἰθριος γὰρ καὶ ἀρόσιμός ἐστιν ὁ χώρος καὶ οὐκ ἔχων οἰκήματα ἢ μόνα τὰ περὶ τὴν δρῦν πάλαι τοῦ Ἀβραάμ γενόμενα καὶ τὸ φρέαρ τὸ παρ' αὐτοῦ κατασκευασθέν*). At first sight the parallelism of these two passages seems a little artificial; but this objection disappears as soon as we observe that in either case the absence of buildings is a corollary from the sanctity of the place. It had been rendered holy by the Theophany which had occurred there. Each of our three Apocalyptists is occupied with the subject of the Upper Jerusalem, and examination shews that *it was believed that Abraham had seen this Heavenly City at Mamre*. Let us then compare what Ezra and Apocalyptic Baruch say on this point:

Bar. Apocal.

iv. 3. "Ostendi eam (sc. Jerusalem) Adamo priusquam peccaret; cum vero abiecit mandatum, sublata est ab eo, ut etiam paradisos. Et postea ostendi eam servo meo Abrahamo noctu inter divisiones victimarum."

4 Esdras.

x. 50. Ostendit tibi Altissimus claritatem gloriæ eius (sc. Jerusalem) et pulchritudinem decoris eius. Propterea enim dixi tibi ut venires in agrum ubi non est fundamentum aedificiî; nec enim poterat opus aedificiî hominis sustinere in loco ubi incipiebat Altissimi civitas ostendi.

The place of Ezra's vision is the same as that of Abraham.

We have thus proved that the scene of the 14th chapter of Ezra is geographically identified with the neighbourhood of Abraham's oak; if any doubt remained on our mind as to the correctness of

¹ p. 34.

the investigation, it might be dispelled by the following further consideration : when Ezra is sitting under the oak, a voice comes to him out of the bush saying, Ezra, Ezra ; and the speaker goes on to say that it was in the burning bush that he appeared to Moses when the people was in bondage in Egypt. Now we may very well ask, What is the reason for this abrupt allusion to the burning bush ; how came the author's mind to travel that way ? The answer is that the Terebinth of Mamre was supposed to have the same virtue of non-inflammability as the bush in Mount Sinai. The evidence for this will be found in Reland, *Palestina*, under the heading Chebron, and is as follows :

Ps. Eustathius, writing a commentary on the *Hexaemeron*, says (Migne, *Patr. Gr.* xviii. 778) that Joseph was buried in the same place as his ancestor Abraham, and that in this place is the Terebinth where Jacob hid the idols of Laban, and which is still revered by the people of the neighbouring countries... And if this Terebinth be set on fire it is swallowed in flame and one would think it to have been consumed ; but as soon as the fire is extinguished the Terebinth is seen to be unharmed. The same account is given by Georgius Syncellus in his *Chronographia* (ed. Niebuhr, Vol. I. 202) : and it appears that Syncellus and Eustathius are drawing from a common authority, since their language is similar, and they both make the mistake of confounding the oak at Shechem with the tree at Mamre. This common authority is named by Syncellus ; it is the chronographer Julius Africanus, who must therefore be also responsible for the blunder¹.

¹ We give the passages side by side :

Ps. Eustathius.

Ἐπὶ τέλει δὲ καὶ τὸν Ἰωσήφ, τῆς Αἰγύπτου ἀποχωρήσαντες, κηδεύουσιν ἔνθα ὁ πρόπατωρ αὐτῶν Ἀβραὰμ προκεκδήντο· ἐν ᾧ τόπῳ ὑπῆρχε καὶ ἡ τερέβινθος, ὑφ' ἧς ἐκρύβην Ἰακώβ τῆς (sic) Λάβαν τὰ εἰδῶλα, ἥτις ἔτι καὶ νῦν εἰς τιμὴν τῶν προγόνων ὑπὸ τῶν πλησιοχώρων θρησκεύεται· ἔστι γὰρ ἄχρι τοῦ δεῦρο παρὰ τὸν πρέμνον αὐτῆς βωμός, ἐφ' ᾧ τὰ τε ὀλοκαυτώματα καὶ τὰς ἐκατόμβας ἀνέφερον· εἶναι τε φασὶ βάβδον αὐτὴν ἐνὸς τῶν ἐπιξενωθέντων ἀγγέλων τῷ Ἀβραάμ, ἥνπερ τῷ τόπῳ τότε παρῶν ἐνεφύτευσε καὶ ἐξ αὐτῆς ἡ ἀξιάγαστος ἀνελύθη τερέβινθος. Ὑφαφθεῖσα γὰρ ὅλη πῦρ

Georgius Syncellus.

Ἡ ποιμενικὴ σκῆνη τοῦ Ἰακώβ ἐν Ἐδέσῃ σωζομένη κατὰ τοὺς χρόνους Ἀντωνίνου Ῥωμαίων βασιλέως διεφθάρη κερανῶν ὥς φησιν ὁ Ἀφρικανός, ἕως τῶν χρόνων αὐτοῦ Ἀντωνίνου ἱστώρησας. Ἰακώβ ἀπαρεσθῆις τοῖς ὑπὸ Σιμεὼν καὶ Λευὶ πραχθεῖσιν ἐν Σικίμοις διὰ τὴν τῆς ἀδελφῆς φθορὰν εἰς τοὺς ἐπιχωρίους, θάψας ἐν Σικίμοις οὓς ἐφέρετο θεοὺς παρὰ τὴν πέτραν ὑπὸ τὴν θαυμάσιαν τερέβινθον ἥτις μέχρι νῦν εἰς τιμὴν πατριαρχῶν ὑπὸ τῶν πλησιοχώρων τιμᾶται, μετήρην εἰς Βαιθήλ· ταύτης παρὰ πρέμνον βωμός ἦν, ὥς φασιν ὁ Ἀφρικανός, τῆς τερέβινθου, ἐφ' ᾧ τὰς ἐκτενὰς ἀνέφερον

We have thus a perfect explanation of the allusion made by Ezra to the burning bush. There was a tradition that the Terebinth was incombustible. It appears, therefore, that we ought to identify the field of Esdras' vision with the neighbourhood of Hebron and the sacred oak. This suggests that we should read *Arbaa*¹ as the name of the field (the ancient name of Hebron being Kiriath-Arba). Writing this in uncial characters, the word easily becomes αρβαδ, from which the *Ardab* of the Armenian is a mere transposition, and Arphad of the Syriac a slight change of two closely related letters. The other variants readily explain themselves in a similar manner.

The Ezra-Baruch legends in the Koran.

We have in the preceding section traced the process of corruption by which the manuscripts of the fourth book of Ezra have disguised the writer's geography almost beyond identification. We will now add something further to the subject, though only in a tentative manner, by trying to demonstrate that traces of our group of Apocalypses or at least of some of them are to be found in the Koran and in Commentaries on the Koran.

The second chapter of the Koran entitled 'the Cow' contains near the close a curious passage which Sale renders as follows: "Hast thou not considered how he behaved himself who passed by a city which had been destroyed even to her foundations? He said, How shall God quicken this city after she hath been dead? And God caused him to die for an hundred years and afterwards raised him to life. And God said, How long hast thou tarried here? He answered, A day or a part of a day. God said, Nay thou hast tarried here an hundred years. Now look on thy food and drink, they are not yet corrupted; and look on thine ass: and this have we done that we might make thee a sign unto them." And Sale remarks that it is the opinion of the Arabic commentators

γίνεται καὶ νομίζεται τοῖς πᾶσιν εἰς κόνιν ἐκ
τῆς φλογὸς ἀναλίσσεται, καίτοι σβεσθεῖσα
μέντοι ἀσινῆς ὅλη καὶ ἀκέραιος δέικνυται.

ἐν ταῖς πανηγύρεσι τῆς χώρας ἔνοικοι, ἡ δ'
οὐ κατεκαίετο δοκοῦσα πίπρασθαι. παρὰ
ταύτην ὁ τάφος Ἀβραὰμ καὶ Ἰσαάκ. φασὶ δέ
τινες ῥάβδον εἶναι τινος τῶν ἐπιζενωθέντων
ἀγγέλων τῷ Ἀβραὰμ φυτευθεῖσαν αὐτόθι.

¹ The LXX give uniformly Arboc, which Jerome corrects to Arbee: "corrupte in nostris codicibus Arboc scribitur cum in Hebraeis legatur Arbee"

that the person spoken of here is Ozair or Ezra. He gives some further expansion of the legends, which it is quite likely that he took from Maracci. At all events there is in this author's *Prodromus ad Refutationem Alcorani* Pt. iv. 85 a good note on the subject, as follows: "Conveniunt omnes, quos videre potui, Alcoranum hic loqui de Ozair, id est Ezra, qui transiens iuxta civitatem Jerusalem iam a Chaldaeis destructam, insidens asino cum canistro ficorum et cyatho pleno musto, coepit ambigere, quomodo posset Deus illam urbem restituere, et habitatores eius in ea extinctos suscitare. Deus autem mori fecit eum, mansitque mortuus per centum annos; post quos suscitatus a Deo, vidit ficus et musti cyathum adhuc integros et incorruptos; asinum vero extinctum et in ossa redactum: ad quae respiciens Ezra iussu Dei vidit illa elevari, atque inter se compacta carne vestiri, et fieri asinum, in quem cum Deus spiritum immisisset statim coepit rudere." D'Herbelot in his *Bibliothèque Orientale*, under the heading *Ozair*, gives the same traditions more at length: "Les interprètes de l'Alcoran disent sur ce passage que l'homme dont il est parlé ici est Ozair ou Esdras lequel ayant été mené in captivité par Bakht-al-Nassar ou Nabuchodonosor à Babylone, et delivré ensuite miraculeusement de sa prison, se transporte à Jerusalem, qui étoit pour lors ruinée, et s'arrêta à un village, fort proche de cette ville, nommé *Sair abad*, maison de promenade, et *Deir anab*, lieu de vignoble, une vigne dans la signification que les Italiens donnent à ce mot. Ce lieu qui n'étoit couvert que de mazures, avoit cependant dans son terroir des Figuiers et des Vignes chargez de fruits. Esdras en prit pour sa provision et alla se loger auprès de quelque pan de muraille qui restoit encore sur pied. Ce fut là qu'il établit un hermitage où il vivoit des fruits qu'il avoit cueillis et tenoit un asne que luy avoit servi de monture pendant son voyage, attaché auprès de luy. Ce saint homme en considerant de ce lieu là les ruines de la ville Sainte pleuroit amèrement devant le Seigneur et disoit souvent en luy même, plutôt en admirant la puissance de Dieu, qu'en murmurant contre elle: 'Comment les ruines de Jerusalem, pourroient-elles jamais se relever.' Mais il n'eût pas plutôt conçu cette pensée que Dieu le fit mourir sur le champ et le tint caché aux yeux de hommes avec tout ce qu'il avoit autour de lui, l'espace d'un siècle entier, au même état qu'il se trouvoit pour lors. Cependant, soixante et dix ans après la mort de Nabuchodonosor, Dieu suscita Noschek Roy de Perse, qui ordonna

le rétablissement de la Ville et du Temple de Jerusalem, et trente ans après les ordres de ce Roy ayant été exécutez Dieu resuscita Esdras en un tel état qu'il luy parut n'avoir dormi que pendant un jour, mais ayant ouvert les yeux, il connut bientôt, que Dieu avoit opéré un grand miracle en sa personne, et s'écria aussitôt, Dieu certainement est tout puissant; car, il peut faire tout ce qu'il luy plait."

Upon the passage which we have quoted from the Koran, Maracci endeavours to shew that the legend, though it contains more figments than words, agrees better with the history of Nehemiah than Ezra; the cup of wine being a reminiscence of the office which Nehemiah held at the Persian court, and the ass a reflection of the beast on which he made the circuit of the ruined city. But he asks in despair "Whence the death of Nehemiah and his ass: and their resurrection after the lapse of a century; and whence this story of the marvellous conservation of wine and figs? Some persons say that it is not Ezra, nor Nehemiah, but a certain *Alchedrum*." The story certainly is a queer confusion of legends; it must be evident that we have many single gentlemen rolled into one, and that the principal one amongst them is our friend Abimelech the Ethiopian, whose basket of figs furnishes the explanation which Maracci searched the Scriptures for in vain.

The mythical *Alchedrum* is therefore Abimelech: and the sentence in which God directs the supposed Ezra to look on his marvellously conserved food and drink has its origin in the passage where the old man tells Abimelech to look into the basket and see that the figs have no evil smell though they were gathered 66 years ago. We may, if we please, refer the story of the ass and the wine-cup to Nehemiah, but as we have here a practically certain origin for the Mohammedan legends, it is best to exhaust this source before seeking a second, and we find that the story of the sleep of Abimelech is the origin of the one hundred years' death-sleep of the Ezra of the Koran. And indeed although the Koran gives the time as 100 years, the legends quoted by D'Herbelot shew traces of a knowledge of the number 70 as given in corrected copies of the Christian Baruch. Why else should it have been said that the 100 years was made up of 70 years from the death of Nebuchadnezzar together with 30 years to the time of Noschek, king of Persia?

Further, the passage in the Koran is used to prove the resurrection of the dead by the resurrection of the city. And it is to be noticed that Abimelech when he sees that the figs exude still their milky juice, breaks into an exultant apostrophe to his flesh which God is able to revive.

The writer, too, who made his Ezra sleep 100 years and think it to be a day or part of a day, is in exact consonance with Abimelech who thinks he has slept a very little and would in fact like to sleep a little more.

But, as we have said, the legends collected in D'Herbelot are not totally explained by the introduction of our Abimelech. It looks as if the fourth book of Ezra were here, if not some biblical allusion also to Nehemiah. The account which he gives of Ezra finding a hermitage in a desolate spot not far from the city, is marvellously like the story of the sojourn in the Field of Arphad; his diet of figs may be only a correction for the flowers which Ezra is directed to live on. And even the allusion to the ruins which covered the ground may be an adaptation of Ezra's note that the spot was clear of buildings. We will even go so far as to suspect that the field of Arbāa (Arbad) underlies the perplexing names which D'Herbelot quotes for the place of Ezra's hermitage.

It seems, therefore, to sum up, that there is good reason to believe that Mohammed was acquainted with the Christian Baruch, and that the Commentators who explained his allusion were acquainted also with the fourth book of Ezra. In view of the uncertainty which prevails with regard to the literary sources of Mohammedanism especially on the Christian side, it may be not wholly useless to have given some confirmation of the theory of Ceriani, that the second chapter of the Koran draws on the story contained in the last words of Baruch.

The Christian Baruch, 4 Ezra, and Barnabas.

An interesting question arises in one passage of our author as to the possibility of a reference to the epistle of Barnabas, and the subject is important enough in view of the uncertainty of the

date of that epistle; so that it seems hardly fair to dismiss the matter in the compass of a foot-note.

In c. ix. 15, we find a prediction that the tree of life which is planted in the midst of Paradise will come into the world, and that this tree will cause the fruitless trees to become fruitful, and the boastful trees to wither; and the tree which is established will make them to bend. So at least we have edited, deserting the reading of our MSS.: which give the sense 'will make them to be judged.' The difference between the two readings is only a single letter. Our best MS. has failed here, and the text of the Ethiopic version is so confused, that it is almost unintelligible. That our emendation, however, is substantially correct may be seen from the following passage quoted in Gregory of Nyssa amongst a number of Testimonies against the Jews¹:

Καὶ τότε ταῦτα συντελεσθήσεται, λέγει Κύριος, ὅταν ξύλον ξύλων (l. ξύλω) κλιθῇ καὶ ἀναστῇ καὶ ὅταν ἐκ ξύλου αἷμα στάξει (l. στάξη). The two corrections which we have given in brackets, obvious enough of themselves, are given by Ceriani from an Ambrosian MS.²

Now this bending of tree to tree is exactly what is spoken of in our author, when he intimates that the tree of life will make all the other trees to bow before it. So that our correction of the text is justified, as we shall see more clearly as we proceed.

Two questions then arise, first as to the origin of the quotation which Nyssen makes: second as to the meaning of the similar matter in the text of our author. We will take these points in order. The passage is very like one in the twelfth chapter of Barnabas, which runs as follows: 'Ὁμοίως πάλιν περὶ τοῦ σταυροῦ ὀρίζει ἐν ἄλλῳ προφήτῃ λέγοντι. Καὶ πότε ταῦτα συντελεσθήσεται; λέγει Κύριος· ὅταν ξύλον κλιθῇ καὶ ἀναστῇ καὶ ὅταν ἐκ ξύλου αἷμα στάξη.

We may regard it as almost certain that Gregory Nyssen is quoting from Barnabas; the differences being so slight that we can at once allow for them by the ordinary processes of transcription. We have only to imagine the text of Barnabas to have dropped ξύλω after ξύλον and all is clear. But this brings

¹ Zacagni, *Collectanea Monumenta*, p. 309; Ceriani, *Mon. Sac.* v. i. 108.

² Cod. C. 135, Inf.

Barnabas into very close relation with the language of the Christian Baruch.

We must not, however, assume any direct quotation between them, inasmuch as the passage in Barnabas is distinctly given as a quotation from one of the prophets. Nor should we have much difficulty in identifying this prophet with the Apocalyptic Ezra, because a great part of the quotation can at once be found in his text, and because the Christian Baruch, who exhibits parallel language to that part of Barnabas' quotation which cannot be found in the text of Ezra as edited, has been shewn to have internal relations with the fourth book of Ezra. We will place the passages side by side for the sake of comparison :

Gregory Nyss., and
Barnabas (xii. 1).

Καὶ πότε ταῦτα συν-
τελεσθήσεται ; λέγει
Κύριος· Ὅταν ξύλον
κλιθῇ καὶ ἀναστῇ καὶ
ὅταν ἐκ ξύλου αἷμα
στάξῃ.

Christian Baruch (ix. 15,
16).

Γίνεται δὲ μετὰ τοὺς καιροὺς
τούτους, καὶ ἔρχεται εἰς τὴν
γῆν τὸ δένδρον τῆς ζωῆς τὸ ἐν
μέσῳ τοῦ παραδείσου φύτευθέν,
.....
καὶ τὰ βεβλαστηκότα καὶ με-
γαλυνχοῦντα.....
ποιήσει κλιθῆναι τὸ δένδρον τὸ
στηριχθέν.....
.....
τὰ γλυκέα ὕδατα ἀλμυρὰ γε-
νήσονται.

4 Ezra iv. 33, v. 5, 9.

Et respondi et dixi, Quo-
modo et quando haec?.....
.....
et de ligno sanguis stillabit,
et lapis dabit vocem suam
.....
et in dulcibus aquis salsae
invenientur.

We must then, I think, conclude that the Recension of 4 Ezra which Barnabas and the Christian Baruch used contained a clause answering to ὅταν ξύλον ξύλῳ κλιθῇ. This is, I think, the very conclusion arrived at by Le Hir in his discussion of the fourth book of Ezra¹. Le Hir, however, goes further and very ingeniously seeks the origin of the whole Ezra passage in the prophet Habakkuk, where the stone cries from the wall that is builded by deceit and the cross-beam answers back to it, and where woe is denounced on those who build houses by blood. The conjunction of stone, tree and blood is suggestive even in a translation, especially when it is a talking stone, too, as in 4 Ezra and in the later Baruch. But M. Le Hir goes so far as to restore the whole passage of Habakkuk into close textual agreement with Barnabas and Ezra, as the following will shew :

¹ *Études Bibliques*, p. 193.

Habakkuk ii. 11.

כפים מעין יעננה: הוי בנה עיר בדמים וכוונ...

Suggested corruption of Le Hir,

כפים מעין יענה ויעיר: בדם ימוך

Now without endorsing the whole of the suggestions of this reading, we may say that the first one, which turns on the equivalence of the two Hebrew roots which mean respectively *to answer* and *to bend*, is so striking that we may be pretty sure we have tracked the quotations to their source; and we may add to this, what I do not think Le Hir noted, that the words which precede in Habakkuk "the stone shall cry out of the wall," answer exactly to "the stone shall give its voice" of Ezra, and, in fact, furnish the momentum for the misunderstandings which culminate in the personification of the dying Jeremiah by a stone. We may therefore follow with confidence the greater part of Le Hir's reasoning.

And, bearing in mind that the Hebrew text of the passage in Habakkuk is perfectly satisfactory, and needs neither textual correction nor any subtleties of interpretation, we may say that in a certain circle, probably Jerusalem, there prevailed a flagrant corruption or mistranslation of the passage: that this corruption became the basis of exegetical subtleties on the part of Apocryphal writers, both Jews and Christians: the former, probably, explained the 'blood that drops from wood' of the martyrdom of Isaiah: while the latter, who never missed the chance of seeing the 'cross' in any reference to 'beams,' 'trees,' 'rods' or 'timber,' were able to find a prophetic testimony to the central object of their faith in the fact that 'wood should bend to wood,' or that 'blood should trickle' therefrom.

And this brings us to the second point; viz. the meaning which our Christian Baruch attached to the words which he has absorbed. He is preaching the triumph of the Cross; this may be regarded to be as certain as if he had followed Barnabas' example and prefixed a paragraph saying that the prophet is here speaking of the Cross. But it is not quite so clear whether he is speaking of the assumption of the Cross, which is of course the Tree of Life, into Paradise and its adoration by the rest of the trees of the garden, or of the descent of the Tree from Paradise and its adoration by the rest of the trees of the world. The former opinion derives some weight from the fact that some of the early Christians believed the Cross

had been caught up into Paradise, a natural belief when we consider that they had so persistently taught that it was the Tree which had been planted in the midst of the garden.

But the latter opinion agrees better with the statement of the writer that the tree is coming to the earth and that the fruitless trees (i.e. the Gentiles) will under its influence bear fruit, while those that have sprouted and are high-minded (i.e. the extreme section of the Jews) will have to bow before it.

ΤΑ ΠΑΡΑΛΕΙΠΟΜΕΝΑ ΙΕΡΕΜΙΟΥ ΤΟΥ ΠΡΟΦΗΤΟΥ.

Ι. Ἐγένετο, ἥνίκα ἡχμαλωτεύθησαν οἱ υἱοὶ Ἰσραὴλ ἀπὸ τοῦ βασιλέως τῶν Χαλδαίων, ἐλάλησεν ὁ Θεὸς πρὸς Ἱερεμίαν· Ἱερεμία, ὁ ἐκλεκτός μου, ἀνάστα, ἔξελθε ἐκ τῆς πόλεως ταύτης, σὺ καὶ Βαρούχ· ἐπειδὴ ἀπολῶ αὐτὴν διὰ τὸ πλήθος τῶν ἁμαρτιῶν τῶν κατοικούντων ἐν αὐτῇ. Αἱ γὰρ προσευχαὶ 2 ὑμῶν ὡς στῦλος ἐδραῖος ἐστὶν ἐν μέσῳ αὐτῆς, καὶ ὡς τεῖχος ἀδαμάντινον περικυκλοῦν αὐτήν. Νῦν ἀναστάντες ἐξέλθατε 3 πρὸ τοῦ τὴν δύναμιν τῶν Χαλδαίων κυκλῶσαι αὐτήν. Καὶ 4 ἀπεκρίθη Ἱερεμίας, λέγων· Παρακαλῶ σε, Κύριε, ἐπιτρέψόν μοι τῷ δούλῳ σου λαλῆσαι ἐνώπιόν σου. Εἶπεν δὲ αὐτῷ ὁ Κύριος· Λάλει, ὁ ἐκλεκτός μου Ἱερεμίας. Καὶ ἐλάλησεν 5 Ἱερεμίας, λέγων· Κύριε παντοκράτωρ, παραδίδως τὴν πόλιν τὴν ἐκλεκτὴν εἰς χεῖρας τῶν Χαλδαίων, ἵνα καυχῆσθαι ὁ βασιλεὺς μετὰ τοῦ πλήθους τοῦ λαοῦ αὐτοῦ, καὶ εἴπῃ ὅτι, Ἰσχυσα ἐπὶ τὴν ἱερὰν πόλιν τοῦ Θεοῦ; Μὴ, Κύριέ μου· ἀλλ' 6 εἰ θέλημά σου ἐστίν, ἐκ τῶν χειρῶν σου ἀφανισθήτω. Καὶ 7 εἶπε Κύριος τῷ Ἱερεμίᾳ· Ἐπειδὴ σὺ ἐκλεκτός μου εἶ, ἀνάστα καὶ ἔξελθε ἐκ τῆς πόλεως ταύτης, σὺ καὶ Βαρούχ· ἐπειδὴ ἀπολῶ αὐτὴν διὰ τὸ πλήθος τῶν ἁμαρτιῶν τῶν κατοικούντων

Title, with *abc*; *aeth*, The rest of the words of Baruch.

Ι. 1 *ηνικα ab*; *οτε c* | *οι; c om* | *απο ab*; *υπο c* | *Ιερεμian cum c aeth*; *ab add τον προφητην λεγων* | *Ιερ...Βαρουχ ab, aeth*; *αναστηθη και συ και Βαρουχ c* | *απολω c*; *απολλω ab* | *αυτην ab aeth*; *την πολιν ταυτην c* | *κατοικουντων ab*; *ενοικουντων c* | *v. 2 εστιν; c om* | *περικυκλων a*; *περικυκλων b*; *περι τα τειχη αυτης c (not aeth)* | *v. 3 νυν αναστ. εξελθατε ab (α εξελθετε); νυν ουν c*, inserting *ανασταντες εξελθατε* at the end of the verse | *προ του κτε* following the *Menaea* and *de*; but *abc προ του η δυναμις των χαλδαιων κυκλωσει (κυκλωση a) αυτην* | *v. 4 απεκριθη ab*; *ελαλησεν c* | *επιτρεψον μοι ab*; *κελευσον με c* | *τω δουλω σου ab aeth*; *c om* | *ενωπιον σου ab*; *λογον εναντιον σου c* | *αυτω c aeth*; *ab om* | *v. 5 εαλησεν ab*; *ειπεν c* | *λεγων ab*; *om c* | *παριδιδws a*; *παριδιδws b*; *παριδιδοις c* | *πολιν; aeth add ταυτην* | *μετα...αυτου ab aeth*; *c om* | *v. 6 σου (1°)*; *b σον* | *σου (2°)*; *c om* | *v. 7 Ks*; *ab o ks* | *τω Ιερ. ab*; *προς Ιερεμian c* | *αναστα ab*; *αναστηθι c* | *εκ...ταυτης aeth om* | *απολω bc*; *a om* | *κατοικ. ab*; *ενοικ. c* | *end of verse a adds απολλω.*

8 ἐν αὐτῇ. Οὐτε γὰρ ὁ βασιλεὺς, οὔτε ἡ δύναμις αὐτοῦ, δυνή-
 9 σεται εἰσελθεῖν εἰς αὐτήν, εἰ μὴ ἐγὼ πρῶτος ἀνοίξω τὰς πύλας
 10 αὐτῇ. Ἀνάστηθι οὖν, καὶ ἄπελθε πρὸς Βαρούχ, καὶ ἀπάγγειλον
 αὐτῷ τὰ ῥήματα ταῦτα. Καὶ ἀναστάντες ἔκτην ὥραν τῆς
 νυκτός, ἔλθετε ἐπὶ τὰ τείχη τῆς πόλεως, καὶ δείξω ὑμῖν, ὅτι,
 11 ἐὰν μὴ ἐγὼ πρῶτος ἀφανίσω τὴν πόλιν, οὐ δύνανται εἰσελθεῖν
 εἰς αὐτήν. Ταῦτα εἰπὼν ὁ Κύριος, ἀπῆλθεν ἀπὸ τοῦ Ἰερεμίου.
 1 ΠΙ. Ἰερεμίας δὲ διέρρηξεν τὰ ἱμάτια αὐτοῦ καὶ ἐπέθηκεν
 χοῦν ἐπὶ τὴν κεφαλὴν αὐτοῦ· καὶ εἰσῆλθεν εἰς τὸ ἁγιοστήριον
 2 τοῦ Θεοῦ· καὶ ἰδὼν αὐτὸν ὁ Βαρούχ χοῦν πεπασμένον ἐπὶ τὴν
 κεφαλὴν αὐτοῦ, καὶ τὰ ἱμάτια αὐτοῦ διεβρώγῳτα, ἔκραξε φωνῇ
 3 μεγάλῃ, λέγων· Πάτερ Ἰερεμία, τί ἔστι σοι, ἡ ποῖον ἁμάρτημα
 ἐποίησεν ὁ λαός; Ἐπειδὴ ὅταν ἡμαρτάνεν ὁ λαός, χοῦν ἔπασσεν
 ἐπὶ τὴν κεφαλὴν αὐτοῦ ὁ Ἰερεμίας, καὶ ἠύχετο ὑπὲρ τοῦ λαοῦ,
 4 ἕως ἂν ἀφεθῇ αὐτῷ ἡ ἁμαρτία. Ἠρώτησε δὲ αὐτὸν ὁ Βαρούχ,
 5 λέγων· Πάτερ, τί ἔστι σοι; Εἶπε δὲ αὐτῷ Ἰερεμίας· Φύλαξαι
 τοῦ σχίσαι τὰ ἱμάτιά σου, ἀλλὰ σχίσωμεν τὰς καρδίας
 ἡμῶν· καὶ μὴ ἀντλήσωμεν ὕδωρ ἐπὶ τὰς ποτίστρας, ἀλλὰ
 6 κλαύσωμεν καὶ γεμίσωμεν αὐτὰς δακρύνων· ὅτι οὐ μὴ ἐλεήσῃ
 τὸν λαὸν τοῦτον ὁ Κύριος. Καὶ εἶπε Βαρούχ· Πάτερ Ἰερεμία, τί
 7 γέγονε; Καὶ εἶπεν Ἰερεμίας ὅτι, Ὁ Θεὸς παραδίδωσι τὴν πόλιν
 εἰς χεῖρας τοῦ βασιλέως τῶν Χαλδαίων, τοῦ αἰχμαλωτεῦσαι
 8 τὸν λαὸν εἰς Βαβυλῶνα. Ἀκούσας δὲ ταῦτα Βαρούχ, διέρρηξε
 καὶ αὐτὸς τὰ ἱμάτια αὐτοῦ, καὶ εἶπε· Πάτερ Ἰερεμία, τίς σοι
 9 ἐδήλωσε τοῦτο; Καὶ εἶπεν αὐτῷ Ἰερεμίας· Ἐκδεξαι μικρὸν

v. 8 eis ab; προς e | τας π. αὐτης ab; αυτοῖς τας πύλας e | v. 10 δεῖξω ab; δεικνῶ e |
 εαν μη e; εαν μητι ab | αφαν. τὴν πόλιν ab aeth; ἀπολεσῶ αὐτην e | πόλιν; ab add και
 ανοίξω, not e, aeth | δύνανται ab; δυνήσονται e | eis αὐτην ab; εν αὐτη e | v. 11 ἀπῆλθεν
 ab; ἀνεχώρησεν e | Ιερ.; e adds eis τον ουνον; not ab aeth.

ΠΙ. 1 Ιερ...θεου (b)c aeth; ab δραμων δε Ιερεμίας ἀνηγγειλε τῷ Βαρούχ ταῦτα (b
 ταῦτα τῷ Β.) και ἐλθοντες εἰς τον ναον του θεου; b adds διερρηξεν τα ιματια αὐτου
 Ιερεμίας και ἐπέθηκεν χουν επι την κεφαλην αὐτου· και ηρξαντο ἀμφοτεροι κλειεν εν τῷ
 ἁγιοστηριῳ του θεου | v. 2 και ιδων ab; ειδων δε e | χουν; e om | αὐτου (1°); e add χουν|
 φωνη μεγαλη λεγων a; φωνην μεγαλην λεγ. b; e om | πατερ ab aeth; e om | τι εστιν
 ab aeth; απεστην e | ἐποιησεν ab aeth; ημαρτεν e | v. 3 ημαρτανεν ab aeth; ημαρ-
 τεν e | εως αν ab; οπως e | αὐτω ab aeth; αυτοῖς e | αμαρτια; e add αὐτη |
 v. 4 ἐρωτησεν ab; ἐπερωτησεν e | αὐτον ab; αὐτω e | ο; e om | πατερ τι εστι σοι e aeth;
 τι εστιν τουτο ab | v. 5 τα ιματια σου; e om | αλλα (1°); ab add μαλλον (not e aeth) | και
 (1°); e om | ποτιστρας; b ποτιστριας | αλλα (2°); e add μαλλον | τον λαον τ. ο κ. ab; κυρ.
 τ. λ. τ. e | v. 6 πατερ Ιερ. ab aeth; προς Ιερεμιαν e | v. 7 Ιερεμίας ab aeth; e om | παρα-
 δίδωσει a; παραδιδει b; παραδω e | την πολιν ab aeth; e add την εκλεκτην | του βασιλεως
 ab aeth; e om | του αιχ. ab; και αρουσι e | v. 8 ταῦτα ab aeth; e om | και αὐτος ab
 (aeth); e om | και ειπεν ab aeth; λεγων e | ἐδηλωσε ab; ἀπηγγειλεν e.

μετ' ἐμοῦ ἕως ὥρας ἑκτης τῆς νυκτός, ἵνα γνῶς, ὅτι ἀληθές ἐστι τὸ ῥῆμα. Ἐμειναν οὖν ἐν τῷ θυσιαστηρίῳ κλαίοντες. 10

III. Ὡς δὲ ἐγένετο ἡ ὥρα τῆς νυκτός, καθὼς εἶπεν ὁ Κύριος 1 τῷ Ἰερεμίᾳ, ἦλθον ὁμοῦ ἐπὶ τὰ τεῖχη τῆς πόλεως Ἰερεμίας καὶ Βαρούχ. Καὶ ἐγένετο φωνὴ σάλπιγγος, καὶ ἐξῆλθον ἄγγελοι 2 ἐκ τοῦ οὐρανοῦ, κατέχοντες λαμπάδας ἐν ταῖς χερσὶν αὐτῶν, καὶ ἔστησαν ἐπὶ τὰ τεῖχη τῆς πόλεως. Ἰδόντες δὲ αὐτοὺς 3 Ἰερεμίας καὶ Βαρούχ, ἔκλαυσαν, λέγοντες· Νῦν ἐγνώκαμεν ὅτι ἀληθές ἐστι τὸ ῥῆμα. Παρεκάλεσε δὲ Ἰερεμίας τοὺς ἄγγέλους, 4 λέγων· Παρακαλῶ ὑμᾶς μὴ ἀπολέσθαι τὴν πόλιν ἄρτι, ἕως ἂν λαλήσω πρὸς Κύριον ῥῆμα. Καὶ εἶπεν Κύριος τοῖς ἄγγέλοις· Μὴ ἀπολέσητε τὴν πόλιν ἕως ἂν λαλήσω πρὸς τὸν ἐκλεκτὸν μου Ἰερεμίαν. Καὶ εἶπε· Δέομαι, Κύριε, κέλευσόν με λαλήσαι ἐνώπιόν σου. Καὶ εἶπε Κύριος· Λάλει, ὁ ἐκλεκτός μου Ἰερεμίας. 5 Καὶ εἶπεν Ἰερεμίας· Ἴδου νῦν, Κύριε, ἐγνώκαμεν ὅτι παραδίδως 6 τὴν πόλιν σου εἰς χεῖρας τῶν ἐχθρῶν αὐτῆς, καὶ ἀπαροῦσι τὸν λαὸν εἰς Βαβυλῶνα. Τί ποιήσωμεν τὰ ἁγία σου ἢ τὰ σκεύη τῆς 7 λειτουργίας σου, τί θέλεις αὐτὰ ποιήσωμεν; Καὶ εἶπεν αὐτῷ ὁ 8 Κύριος· Ἄρον αὐτά, καὶ παράδος αὐτὰ τῇ γῇ καὶ τῷ θυσιαστηρίῳ λέγων, Ἄκουε, γῇ, τῆς φωνῆς τοῦ κτίσαντός σε ἐν τῇ περιουσίᾳ τῶν υἱάτων, ὁ σφραγίσας σε ἐν ἑπτὰ σφραγίσιν, ἐν ἑπτὰ καιροῖς, καὶ μετὰ ταῦτα λήψῃ τὴν ὀραιότητά σου· φύλαξον τὰ σκεύη τῆς λειτουργίας ἕως τῆς συνελεύσεως τοῦ ἡγαπημένου.

v. 9 το ρημα bc aeth; ab add τουτο | ον c aeth; ab add αμφοτεροι | at the end ab add και ησαν διερωρωτα τα ιματια αυτων και η γη επι τας κεφαλαι αυτων.

III. 1 ws ab; ste c | της νυκτος ab aeth; c om | Ιερ. και Βαρ. ab; c aeth om | at end aeth adds und setzen sich nieder indem sie warteten | v. 2 και ιδου α; και aeth; c om | εγενετο; c om | σαλπιγγος c aeth; σαλπιγγων ab | και (2°); c om | αγγ.; c οι αγγ. | κατεχοντες; c εχοντες | εν τ. χ. αυτων ab aeth; c om | επι ab; eis c | της πολεως ab aeth; c om | v. 3 λεγοντες c aeth; και ειπαν ab | εγνωκαμεν ab; εγνωμεν c | v. 4 πολιν; c adds ταυτην (not ab aeth) | προς κ. ρ. c aeth; μετα του θυ του υψιστου ab | και ειπ...Ιερεμιαν c aeth; ab om | και ειπε (2°); ab add κλαιων; c om | δεομαι...Ιερ. (v. 5) ab aeth; c om | v. 6 Κυριε; c om | εγνωκαμεν ab; εγνωμεν c | παραδιδως α; παραδιδως b; παραδιδως c | σου; c om | των εχθρων αυτης ab aeth; των Χαλδαιων c | απαρουσι; c αρουσι | v. 7 text as in c (aeth); ab τι θελεις ποιησω τα αγια σκευη της λειτουργιας | v. 8 αυτω ο; c om | αρον ab aeth; αρατε c | παραδος ab aeth; παραδοτε c | και τω θνσ. c aeth (dem Erdboden und dem Hause des Heiligtums); ab om | λεγων ab aeth; c om | ακ. γη; οτι γη ακ. c | της φωνης ab (aeth); c om | εν τη π. τ. υδ. ab (aeth durch die Kraft der Gewässer); c ο πλασας σε εν ουσια των κτισματων | ο σφρ. σε; e men τον σφραγισαντος σε | εν επ. σφρ. ab aeth; c om | εν επ. κ. ab (c καιροις); aeth om | και; c om | ληψη τ. ωρ. σου ab (aeth); ληψη την οδον τη ωραισθητι σου c | φυλαξον; c και φυλαξης | de men aeth εως της συνελευσεως τ. η; εως της συντελειας τ. η. ab; c εως ερωτησιν ποιηση κς περι αυτων' οτι ημεις ουκ ευρεθημεν αξιοι φυλαξαι

- 9 Καὶ ἐλάλησε Ἱερεμίας Παρακαλῶ σε, Κύριε· δειξόν μοι, τὶ ποιήσω Ἀβιμέλεχ τῷ Αἰθίοπι· ὅτι πολλὰς εὐεργεσίας ἐποίησε τῷ λαῷ καὶ τῷ δούλῳ σου Ἱερεμία· ὅτι αὐτὸς ἀνέσπασέ με ἐκ τοῦ λάκκου τοῦ βορβόρου καὶ οὐ θέλω αὐτὸν, ἵνα ἴδῃ τὸν ἀφανισμόν τῆς πόλεως καὶ τὴν ἐρήμωσιν· ἀλλ' ἵνα μὴ λυπηθῇ. Καὶ εἶπε Κύριος τῷ Ἱερεμίᾳ· Ἀπόστειλον αὐτὸν εἰς τὸν ἀμπέλωνα τοῦ Ἀγρίππα διὰ τοῦ ὄρους· καὶ ἐγὼ σκεπάσω αὐτὸν, ἕως οὗ ἐπιστρέψω τὸν λαὸν εἰς τὴν πόλιν.
- 11 Εἶπε δὲ Κύριος τῷ Ἱερεμίᾳ· Ἀπελθε μετὰ τοῦ λαοῦ σου εἰς Βαβυλῶνα, καὶ μέινον μετ' αὐτῶν εὐαγγελιζόμενος αὐτοῖς, ἕως οὗ ἐπιστρέψω αὐτοὺς εἰς τὴν πόλιν. Κατάλειψον δὲ τὸν Βαροῦχ ὧδε, ἕως οὗ λαλήσω αὐτῷ. Ταῦτα εἰπὼν ὁ Κύριος, ἀνέβη ἀπὸ Ἱερεμίου εἰς τὸν οὐρανόν. Ἱερεμίας δὲ καὶ Βαροῦχ εἰσῆλθον εἰς τὸ ἁγιαστήριον, καὶ τὰ σκεύη τῆς λειτουργίας παρέδωκαν τῇ γῇ, καθὼς ἐλάλησεν αὐτοῖς ὁ Κύριος· καὶ αὐθωρον κατέπιεν αὐτὰ ἡ γῇ· ἐκάθισαν δὲ οἱ δύο, καὶ ἔκλαυσαν. Πρωίας δὲ γενομένης, ἀπέστειλεν Ἱερεμίας τὸν Ἀβιμέλεχ, λέγων· Ἄρον τὸν κόφινον, καὶ ἄπελθε εἰς τὸ χωρίον τοῦ Ἀγρίππα διὰ τῆς ὁδοῦ τοῦ ὄρους, καὶ ἐνεγκὼν ὀλίγα σῦκα, δίδου τοῖς νοσοῦσι τοῦ λαοῦ· ὅτι ἐπὶ σὲ ἡ εὐφρασία τοῦ Κυρίου, καὶ ἐπὶ τὴν κεφαλὴν σου ἡ δόξα. Αὐτὸς δὲ ἀπελήλυθεν καθὼς εἶπεν αὐτῷ.
- 1 IV. Πρωίας δὲ γενομένης, ἰδοὺ ἡ δύναμις τῶν Χαλδαίων ἐκύκλωσε τὴν πόλιν· ἐσάλπισεν δὲ ὁ μέγας ἄγγελος, λέγων·

autas (sic! shewing that the scribe has wandered to c. iv. v. 4) οτι επιτροποι του ψευδους ευρεθημεν.

v. 9 καὶ ἐλάλ. ab; ἐλ. δε c; ab add κλαίων (not c aeth) | Ἱερεμίας; c add προς κν λεγων | παρακαλῶ; ab add καὶ δυσωπῶ | τῷ λαῷ καὶ τῷ δ. σου c aeth; ab om | Ἱερεμία: aeth adds *weit mehr als alle Leute der Stadt* | οτι αὐτος ἀνέσπασεν ab; c αὐτος γὰρ ἀνέστησεν | τοῦ βορβόρου c aeth; ab om | αὐτον ἵνα ἴδῃ ab aeth; ἵνα ἀφῆς αὐτον ἰδεῖν c | τὸν ἀφαν. ab aeth; τὴν ἐρήμωσιν c | πόλεως; ab add ταυτης | καὶ τ. ἐρ.; c ἡ τὸν ἀφανισμόν ἡ τὴν ἐρήμωσιν | ἀλλ ἵνα μὴ λυπηθῇ aeth; ab ἀλλ ἵνα ἐλεησῃς αὐτον καὶ μὴ λυπ.: c ἡδη (sic) καὶ λυπηθῇ | v. 10 τῷ Ἱερ.; c om | ἀμπέλωνα; c ἀγρον | δια τοῦ ορους καὶ ἐγὼ c aeth; ab καὶ ἐν τῇ σκία τοῦ ορους | εως οὐ ἐπι. ab; c εως ἀποστρέψω | εἰς τὴν πόλιν ab aeth; c εἰς Βαβυλῶνα | v. 11; c om | v. 12; c om; aeth om εως οὐ λαλ. αὐτῷ | v. 13; c λαλήσας δε αὐτῷ ο κς ἀνεχώρησεν εἰς τὸν οἶκον ἀπο τοῦ Ἱερεμίου | v. 14 ἁγιαστήριον; c adds τοῦ θεοῦ | καὶ (2°); ab add ἐπαρantes | τα σκευη; ab add τα ἁγια | παρέδωκαν; ab add αὐτὰ | γῇ ab aeth; c adds καὶ τῷ θυσιαστηριῳ | καθως ἐλάλησεν αὐτ. ο κς b aeth de men; c καθως εἶπεν κς; a om | αὐθωρον c; ab εὐθως | οἱ δυο c aeth; ab om | ἐκλαυσαν; ab add αμα | v. 15 ἀρον...ἀπελθον ab aeth; c ἀπελθε | καὶ...λαου; c om | οτι...δόξα ab (aeth); c οτι εὐφρασία κν εἰς τὴν κεφαλὴν σου ἔξει | v. 16 c aeth; ab καὶ ταῦτα εἰπων Ἱερεμίας ἀπέλυσεν αὐτον· Ἀβιμέλεχ δε ἐπερονεθῇ καθὰ εἶπεν αὐτῷ.

IV. 1 τὴν πόλιν c aeth; a τὴν πόλιν Ἱερουσαλημ; b πασαν τ. π. Ἱερ.

Εἰσέλθατε εἰς τὴν πόλιν ἢ δύναμις τῶν Χαλδαίων· ἰδοὺ γὰρ ἠνεφύχθη ὑμῖν ἡ πύλη. Εἰσῆλθεν οὖν ὁ βασιλεὺς μετὰ τοῦ 2
πλήθους αὐτοῦ, καὶ ἠχμαλώτευσαν πάντα τὸν λαόν. Ἱερემίας 3
δὲ ἄρας τὰς κλεῖδας τοῦ ναοῦ, ἐξῆλθεν ἔξω τῆς πόλεως, καὶ
ἔρριψεν αὐτὰς ἐνώπιον τοῦ ἡλίου, λέγων· Σοὶ λέγω, ἦλιε, λάβε
τὰς κλεῖδας τοῦ ναοῦ τοῦ Θεοῦ, καὶ φύλαξον αὐτὰς ἕως ἡμέρας,
ἐν ᾗ ἔξετάσει σε Κύριος περὶ αὐτῶν. Διότι ἡμεῖς οὐχ εὐρέθημεν 4
ἄξιοι τοῦ φυλάξαι αὐτὰς, ὅτι ἐπίτροποι ψεύδους ἐγενήθημεν.
Ἔτι κλαίοντος Ἱερემίου τὸν λαόν, εἴλκοντο εἰς Βαβυλῶνα. 5
Ὁ δὲ Βαροὺχ ἐπέθηκε χοῦν ἐπὶ τὴν κεφαλὴν αὐτοῦ, καὶ ἐκάθισε, 6
καὶ ἔκλαυσε τὸν θρήνον τοῦτον, λέγων· Διὰ τί ἠρημώθη Ἱερου-
σαλήμ; Διὰ τὰς ἀμαρτίας τοῦ ἡγαπημένου λαοῦ παρεδόθη εἰς
χεῖρας ἐχθρῶν, διὰ τὰς ἀμαρτίας ἡμῶν καὶ τοῦ λαοῦ. Ἀλλὰ 7
μὴ καυχάσθωσαν οἱ παράνομοι, καὶ εἴπωσιν ὅτι, Ἰσχύσαμεν
λαβεῖν τὴν πόλιν τοῦ Θεοῦ ἐν τῇ δυνάμει ἡμῶν. Ἠδυνήθητε ἐπ'
αὐτῇ· ἀλλὰ διὰ τὰς ἀμαρτίας ἡμῶν παρεδόθημεν. Ὁ δὲ Θεὸς 8
ἡμῶν οἰκτειρήσει ἡμᾶς, καὶ ἐπιστρέψει ἡμᾶς εἰς τὴν πόλιν ἡμῶν·
ὅτι οὐκ εἶδον τὸν ἀφανισμόν τῆς πόλεως ταύτης. Ταῦτα εἰπὼν, 10
ἐξῆλθεν, κλαίων καὶ λέγων ὅτι, Λυπούμενος* διὰ σέ, Ἱερου-
σαλήμ, ἐξῆλθον ἀπὸ σοῦ. Καὶ ἔμεινεν ἐν μνημείῳ καθεζόμενος, 11
τῶν ἀγγέλων ἐρχομένων, καὶ ἐκδιηγουμένων αὐτῷ περὶ πάντων.

V. Ὁ δὲ Ἀβιμέλεχ ἤνεγκε τὰ σῦκα τῷ καύματι, καὶ 1
καταλαβὼν δένδρον, ἐκάθισεν ὑπὸ τὴν σκιὰν αὐτοῦ τοῦ ἀνα-

v. 1 ἡ δυναμις; ἀβ πασα ἡ δυν. | πύλη ab; c θύρα | v. 2 εἰσῆλθεν; ἀβ εἰσελθτω | του πλ.
αν. ab; c του ιδιου πλ. | ηχμαλωτευσαν; ἀβ αιχμαλωτευσατω | παντα; c om | λαον; c
adds eis Βαβυλωνα | v. 3 κλειδας; c κλεις | εξω...λεγων ab aeth; και ειπεν c | σοι a aeth;
συ δε | λαβε ab; c δεξαι | κλειδας; c κλεις | του θεου; c om (not ab aeth) | εως (v. 3)...
εγενηθημεν (v. 4) with ab aeth; c εως ερωτησιν ποιησει κς περι αυτων εως της συνελευσεως
του ηγαπημενου | end c adds εξενεγκαν αυτον | v. 5 Ιερემιου; c αυτου | τον λαον; c
om | ειλκοντο; c ειλκοντες | Βαβυλωνα; ab add υπο του βασιλεως των χαλδαιων | v. 6 ὁ
δε Βαρ.; c Ιερεμιας δε διερρηξεν τα ιματια αυτου και | και του λαου ab aeth; c om | v. 7;
c ισχυσαμεν; ηδυνηθημεν ab aeth (?) | τη; c om | ηδυνηθητε επ' αυτη c (aeth); ab om |
παρεδοθημεν ab (? aeth παρεδοθη μεν); c om | v. 8 ἡμων (1^α) ab aeth; c om | οικτειρησει;
c. οικτηρηνεν | και επιστρ. ημ. ab aeth; c. om | v. 9 της π. τ. ab aeth; c. ιλημ | v. 10
ειπων; ab add Βαρουχ | εξηλθεν; ab add εξω της πολεως | λυπουμενος; c λοιπου; ab aeth
om | Ιερουσαλημ; c adds και | εξηλθον; c εξηλθεν | απο σου; c εκ της πολεως | και λεγ....
σου; aeth om | v. 11 καθεζομενος; c om; aeth? | ερχομενων; ab add προς αυτον, not c
aeth | παντων; ab add ων ο κς εμνηνεν αυτω δι' αυτων.

V. 1 καυματι; aeth adds von dort wohin ihn Jeremias gesandt hatte | καταλαβων;
c κατελαβεν | δένδρον; c adds και | υπο την σκιαν αυτου; c om (not ab aeth) | του ανα-
παυμαι δε (b om tou); του αναπαυσαι a.

παῖναι ὀλίγον, καὶ κλίνας τὴν κεφαλὴν αὐτοῦ ἐπὶ τὸν κόφινον
 τῶν σύκων ὑπνώσεν, κοιμώμενος ἔτη ἑξήκονταῖς· καὶ οὐκ
 2 ἐξυπνίσθη ἐκ τοῦ ὑπνου αὐτοῦ. Καὶ μετὰ ταῦτα ἐγερθεὶς
 ἀπὸ τοῦ ὑπνου αὐτοῦ, εἶπεν ὅτι, Ἡδέως ἐκοιμήθην ἂν ἄλλο
 ὀλίγον, καὶ βεβαρημένη ἐστὶν ἡ κεφαλὴ μου, ὅτι οὐκ ἐκορέσθην
 3 τοῦ ὑπνου μου. Καὶ ἀνακαλύψας τὸν κόφινον τῶν σύκων,
 4 εὗρεν αὐτὰ στάζοντα γάλα. Καὶ εἶπεν· Ἦθελον κοιμηθῆναι
 5 ὀλίγον, ὅτι βεβαρημένη ἐστὶν ἡ κεφαλὴ μου· ἀλλὰ φοβοῦμαι,
 μήπως κοιμηθῶ καὶ βραδυνῶ τοῦ ἐξυπνισθῆναι, καὶ ὀλιγορήσῃ
 Ἱερεμίας ὁ πατήρ μου· εἰ μὴ γὰρ ἐσπούδαζεν, οὐκ ἂν ἀπέστειλέ
 6 με ὄρθρου σήμερον. Ἀναστὰς οὖν πορεύσομαι τῷ καύματι, καὶ
 7 *ἀπέλθω ὅπου οὐ καῦμα, οὐ κόπος ἐστὶν καθ' ἡμέραν*. Ἐγερθεὶς
 οὖν ἦρε τὸν κόφινον τῶν σύκων, καὶ ἐπέθηκεν ἐπὶ τῶν ὤμων
 ἑαυτοῦ· καὶ εἰσῆλθεν εἰς Ἱερουσαλὴμ, καὶ οὐκ ἐπέγνω αὐτήν,
 οὔτε τὴν οἰκίαν, οὔτε τὸν τόπον, οὔτε τὸ γένος ἑαυτοῦ, καὶ εἶπεν·
 8 Εὐλογητὸς Κύριος, ὅτι μεγάλη ἔκστασις ἐπέπεσεν ἐπ' ἐμέ· οὐκ
 9 ἐστὶν αὕτη ἡ πόλις· πεπλάνημαι, ὅτι διὰ τῆς ὁδοῦ τοῦ ὄρους
 10 ἦλθον, ἐγερθεὶς ἀπὸ τοῦ ὑπνου μου· καὶ βαρείας οὔσης τῆς
 κεφαλῆς μου διὰ τὸ μὴ κορεσθῆναί με τοῦ ὑπνου μου, πεπλά-
 11 νημαι τὴν ὁδόν. Θαυμαστὸν εἰπείν τοῦτο ἐναντίον Ἱερεμίου,
 12 ὅτι πεπλάνημαι. Ἐξῆλθε δὲ ἀπὸ τῆς πόλεως· καὶ κατανοήσας
 εἶδε τὰ σημεῖα τῆς πόλεως, καὶ εἶπεν· Αὕτη μὲν ἐστὶν ἡ πόλις,
 13 πεπλάνημαι δέ. Καὶ πάλιν ὑπέστρεψεν εἰς τὴν πόλιν, καὶ
 14 ἐξήγησε, καὶ οὐδένα εὗρε τῶν ιδίων. Καὶ εἶπεν· Εὐλογητὸς
 15 Κύριος, ὅτι μεγάλη ἔκστασις ἐπέπεσεν ἐπ' ἐμέ. Καὶ πάλιν

v. 1 κλινας ab; εκλινεν...και c | επι c aeth; υπο ab | των συκων c om (not aeth?) | κοι-
 μωμενος ετη εξ. εξ; aeth om; c και εποισεν εξηκοντα και εξ ετη εκκοιμωμενος | εκ; απο
 c | αυτου; ab add κατα προσταξιν θεου δια τον λογον ον ειπεν των Ιερεμια οτι εγω αυτον
 σκεπασω | v. 2 και (1°); c om | εγερθεις; c εξυπνησθεις | ηδεως; b ιδεως | αν αλλο
 ολιγον; ab αλλ' ολιγον; c ολιγον; aeth wenn ich doch noch ein wenig schliefe | και
 βεβ.; c αλλα βαρια | μου (2°); c aeth om | v. 4 ολιγον; de μεν αλλο ολιγον | βεβαρη-
 μενη; c βαρια | v. 5 ορθρου σημερον c; σημερον ab; beim Lichtwerden aeth | v. 6 text
 corrupt; ab ου γαρ καυμα ου κοπος εστιν καθημεραν; c om; aeth denn die Hitze ist ja
 heiss und niemals lässt sie ganz und gar nach | v. 7 εγερθεις; αναστας c | των ωμων
 ab; την κεφαλην c; aeth om και επεθηκεν...εαυτου | αυτην...εαυτου ab (adding εαυτου
 after τοπον); aeth weder die Stadt noch sein Haus; c om ουτε τον τοπον | και ειπεν;
 ab ουτε τινα ευρεν κ. ειπ. | v. 8 επ' εμε c adds σημερον (not ab aeth) | ουκ; c και ουκ;
 aeth και ελεγεν ουκ | v. 9 πεπλανημαι; c adds γαρ την οδον | ηλθον; c om | v. 10 πεπλα-
 νημαι; ab add δε | v. 11 ειπειν; c εστιν | Ιερεμιου; c του Ι. | οτι πεπλανημαι; c adds
 την οδον; aeth wie sich mir die Stadt verandert hat | v. 12 εξηλ. δε; c και εξηλ | κατα-
 νοησας ειδε ab; ευρεν c | της πολεως ab; αυτης c | c adds at end την οδον | v. 13 πολιν;
 c οδον | και εξηγησε; c om | v. 14 και ειπεν; c om | κυριος; ab ο κυριος; ει κυριε c | εμε;
 c adds και ουκ εστιν αυτη η πολις | v. 15 παλιν; c om (not ab aeth).

ἐξῆλθεν ἔξω τῆς πόλεως. Καὶ ἔμεινε λυπούμενος, μὴ εἰδὼς
 ποῦ ἀπέλθῃ. Καὶ ἀπέθηκε τὸν κόφινον, λέγων· Καθέξομαι 16
 ὧδε, ἕως ὃ Κύριος ἄρῃ τὴν ἔκστασιν ταύτην ἀπ' ἐμοῦ. Καθη- 17
 μένου δὲ αὐτοῦ, εἶδε τινα γηραιὸν ἐρχόμενον ἐξ ἀγροῦ, καὶ λέγει
 αὐτῷ Ἀβιμέλεχ· Σοὶ λέγω, πρεσβύτα, ποία ἐστὶν ἡ πόλις
 αὕτη; Καὶ εἶπεν αὐτῷ· Ἱερουσαλὴμ ἐστὶ. Καὶ λέγει αὐτῷ 18
 Ἀβιμέλεχ· Ποῦ ἐστὶν ὁ Ἱερεμίας ὁ ἱερεὺς, καὶ Βαροῦχ ὁ
 ἀναγνώστης, καὶ πᾶς ὁ λαὸς τῆς πόλεως ταύτης, ὅτι οὐχ
 εὔρον αὐτούς; Καὶ εἶπεν αὐτῷ ὁ πρεσβύτης· Οὐκ εἶ σὺ 19
 ἐκ τῆς πόλεως ταύτης, σήμερον μνησθεὶς τοῦ Ἱερεμίου, ὅτι 20
 ἐπερωτᾷς περὶ αὐτοῦ μετὰ τοσοῦτον χρόνον; Ἱερεμίας γὰρ 21
 ἐν Βαβυλῶνι ἐστὶ μετὰ τοῦ λαοῦ· ἡχμαλωτεύθησαν γὰρ ὑπὸ
 Ναβουχοδονόσορ τοῦ βασιλέως, καὶ μετ' αὐτῶν ἐστὶν Ἱερεμίας
 εὐαγγελίσασθαι αὐτοῖς καὶ κατηχῆσαι αὐτοὺς τὸν λόγον. Εὐθὺς 22
 δὲ ἀκούσας Ἀβιμέλεχ παρὰ τοῦ γηραιοῦ ἀνθρώπου, εἶπεν· Εἰ 23
 μὴ ἦς πρεσβύτης, καὶ ὅτι οὐκ ἐξὸν ἀνθρώπῳ ὑβρίσαι τὸν
 μείζονα αὐτοῦ, ἐπικατεγέλων ἄν σοι καὶ ἔλεγον, ὅτι μαίνῃ·
 ὅτι εἶπας, Ἐχμαλωτεύθη ὁ λαὸς εἰς Βαβυλῶνα. Εἰ ἦσαν 24
 οἱ καταρράκται τοῦ οὐρανοῦ κατελθόντες ἐπ' αὐτούς; οὐπω
 ἐστὶ καιρὸς ἀπελθεῖν εἰς Βαβυλῶνα. Πόση γὰρ ὥρα ἐστὶν, 25
 ἀφ' οὗ ἀπέστειλέ με ὁ πατήρ μου Ἱερεμίας εἰς τὸ χωρίον τοῦ
 Ἀγρίππα ἐπὶ ὀλίγα σῦκα, ἵνα δίδωμεν τοῖς νοσοῦσι τοῦ
 λαοῦ, καὶ ἀπελθὼν ἡνεγκον αὐτὰ, καὶ ἐλθὼν ἐπὶ τι δένδρον 26
 τῷ καύματι, ἐκάθισα τοῦ ἀναπαῆναι ὀλίγον, καὶ ἔκλινα τὴν
 κεφαλὴν μου ἐπὶ τὸν κόφινον, καὶ ἐξυπνισθεὶς

v. 15 πολεις; ab add και ελεγεν· τα μεν σημεια της πολεις εισιν (sic) | ειδως; c ιδων |
 απελθη c; απελθειν ab | και απεθηκεν ab aeth; αφηκεν δε c | κοφινον; c adds των συκων;
 aeth? | v. 16 εως; c adds αν | v. 17 καθημενου; καθεξομενου c | γηραιον; c γηραον ανων |
 ερχ.; c om | λεγει; c ειπεν | Αβιμελεχ ab aeth; c om | σοι; b συ | πρεσβυτα; abc μεν
 πρεσβυτα | αυτω; c om | Ιερουσαλημ; aeth das alte Jerusalem | v. 18 λεγει; c ειπεν |
 που; ab και που | εστιν; ab εισιν | ιερεις aeth; ab ιερεις του θεου; c αρχιερευσ | ο ανα-
 γνωστης; c om; aeth der Levit | v. 19 αυτω ο πρ. c aeth; ο πρ. τω Αβιμελεχ ab | v. 20
 μνησθεις; c εμνησθης | μετα του χρ.; aeth. obgleich du diese ganze Zeit da sassest |
 v. 21 υπο; c υπο του | βασιλεως; c adds Βαβυλωνος; aeth von Persien | εστιν Ιερ.; c
 απηλθεν | και κατ. αυτους ab (αυτοις b); c aeth om | τον λογον abc; aeth om | v. 23 οτι;
 c om | ανθρωπω (aeth); ab ανθρωπω θεου; c ανθρωπων | επικατεγελων αν; κατ. αν de
 men; ειπε καταγελων ab; επικατεγελουν c | σοι c; σου bde men; a om | και ελεγον; a
 om | μαινη a aeth; μενει b; μεν c | οτι ειπας; c om | ηχμαλ.; c ηχμαλωτευσον | v. 24
 ουπω; c ουπω ουκ | καιρος; c om | απελθειν; c πορευθηται | v. 25 αφ' ου; c εξοτου | εις
 ...Αγριππα; c om (not aeth ab) | επι; c ενεγκαι | συκα; ab add ενεγκαι; c aeth om |
 ινα διδ...λαου; c τοις νοσοουσιν | v. 26 απελθων; c om | ηνεγκον αυτα και ελθων; ab om;
 aeth ich bin gegangen und dorthin gelangt und habe genommen was er mir befehlen
 hat und mich umgewandt, und indem ich ging | τι; c om | εκαθισα...κοφινον (1°);
 c om | εκοιμηθην; ab add ολιγον | εξυπνισθεις; c αναστας.

ἀπεκάλυψα τὸν κόφινον τῶν σύκων, νομίζων ὅτι ἐβράδυνα, καὶ
 εὔρον τὰ σῦκα στάζοντα γάλα, καθὼς συνέλεξα αὐτά. Σὺ δὲ
 27 λέγεις, ὅτι ἡχμαλωτεύθη ὁ λαὸς εἰς Βαβυλῶνα; Ἴνα δὲ γνῶς,
 28 λάβε, ἴδε τὰ σῦκα. Καὶ ἀπεκάλυψε τὸν κόφινον τῶν σύκων
 29 τῷ γέροντι. Καὶ εἶδεν αὐτὰ στάζοντα γάλα. Ἰδὼν δὲ αὐτὰ
 30 ὁ γηραιὸς ἄνθρωπος, εἶπεν· Ὡ νιέ μου, δίκαιος ἄνθρωπος εἶ σὺ,
 καὶ οὐκ ἠθέλησεν ὁ Θεὸς δεῖξαί σοι τὴν ἐρήμωσιν τῆς πόλεως.
 Ἦνεγκε γὰρ ταύτην τὴν ἔκστασιν ἐπὶ σέ ὁ Θεός. Ἰδοὺ γὰρ
 ἐξήκοντα καὶ ἕξ ἔτη σήμερόν εἰσιν ἀφ' οὗ ἡχμαλωτεύθη ὁ λαὸς
 31 εἰς Βαβυλῶνα. Καὶ ἵνα μάθῃς, τέκνον, ὅτι ἀληθές ἐστιν, ἀνά-
 βλεψον εἰς τὸν ἀγρὸν καὶ ἴδε, ὅτι ἐφάνη ἡ αὔξησις τῶν γενημά-
 των· ἴδε καὶ τὰ σῦκα, ὅτι καιρὸς αὐτῶν οὐκ ἔστι, καὶ γινώθι.
 32 Τότε ἔκραξε μεγάλη φωνὴ Ἀβιμέλεχ, λέγων· Εὐλόγησω σε,
 Κύριε ὁ Θεὸς τοῦ οὐρανοῦ καὶ τῆς γῆς, ἡ ἀνάπαυσις τῶν ψυχῶν
 33 τῶν δικαίων ἐν παντὶ τόπῳ. Καὶ λέγει τῷ γηραιῷ ἀνθρώπῳ·
 Ποῖός ἐστιν ὁ μὴν οὗτος; Ὁ δὲ εἶπε· Νισσάν· *καὶ ἔστιν ἡ
 34 δωδεκάτη*. Καὶ ἐπάρας ἐκ τῶν σύκων, ἔδωκε τῷ γηραιῷ ἀν-
 θρώπῳ, καὶ λέγει αὐτῷ· Ὁ Θεὸς φωταγωγήσει σε εἰς τὴν ἄνω
 πόλιν Ἱερουσαλήμ.

- 1 VI. Μετὰ ταῦτα ἐξῆλθεν Ἀβιμέλεχ ἔξω τῆς πόλεως, καὶ
 προσηύξατο πρὸς Κύριον. Καὶ ἰδοὺ ἄγγελος Κυρίου ἦλθε,
 καὶ ἀπεκατέστησεν αὐτὸν, ὅπου ἦν Βαρούχ· εἶρε δὲ αὐτὸν ἐν
 2 μνημεῖῳ καθεζόμενον. Καὶ ἐν τῷ θεωρῆσαι ἀλλήλους, ἔκλαυσαν

v. 26 ἀπεκάλυψα; c ἀνεκάλυψα | ἐβράδυνα; c ἐχρονῆσα | τα συκα; c αυτα; (aeth?) |
 συνελεξα; c ἀνελεξαμην | ηχημ. ὁ λαος; c ηχμαλωτευθησαν | v. 30 δικαιοι...συ c (aeth); ab
 δικαιοι ἀποὺ υιοι εἰ σὺ | δεῖξαι σοι c aeth; ab ἰδεν σε | πολεως; ab add ταυτης; not c aeth |
 γαρ (1°); c om | ο θεος; c om | σημερον εἰσιν c (aeth); ab om | ηχημ. ὁ λαος; c αἰχμα-
 λωτευθησαν | v. 31 τεκνον; c om | αληθες εστιν; ab αληθη εἰσιν ἀπερ λεγω σοι | οτι...
 γινωθι aeth, ab (οτι ουκ) (α γεννηματων); c οτι ουκ εστι καιρος των συκων | fin aeth adds
 und er erkannte dass die Zeit von alle diesen nicht war | v. 32 tote; c και | Αβιμελεχ;
 c om | ευλογησω; c ευλογω | κυριε ο θεος; ab ο θεος; c κυριε; aeth O Herr mein Gott,
 Gott | των ψυχων; c om | τοπω ab aeth; c καιρω | v. 33 και λεγει τω γηραιω ανω; c το
 φως το αληθινον· η αληθινη ανταποδοσις, ο ων μεγας, θαυμαστος εἰς τοις αιωνας αμην.
 τοτε λεγει τω γη. αν. | Νισσαν και ε. δωδ.; ab Νισσαν· ο εστι δωδεκατος; c Ισαακ εστιν
 ο μην ουτος; aeth der zwölfte des Monats Nisan welcher Mijazja ist. The Ethiopic
 text must be right: for Nisan is not the twelfth month, either in civil or eccle-
 siastical reckoning. A reference to Ezra viii. 15 will shew the passage on which
 our writer works: "we departed from the river of Ahava on the twelfth day of
 the first month to go unto Jerusalem": the 12th of Nisan is here meant, the return
 commencing in Nisan, in order that Jerusalem may be reached in Ab: cf. Ezra pas-
 sim. Or can it be Νισσαν ο εστιν Αβιβ? v. 34 και επαρας; c ουτος αρas ουν | και
 λεγει; c εἰπων | εἰς; ab ἐπι.

VI. 1 προσηύξατο; c ηεύξατο | ἦλθε και; ab add κρατησας αυτου της δεξιας χειρος |
 αυτον; ab add εἰς τον τοπον | Βαρουχ; ab add καθεζομενος | ευρε δε; c και ευρε | καθε-
 ζομενον; ab om | v. 2 εκλ. αμφ. ὁ (aeth); a om; c εκλαυσαν.

ἀμφοτέροι καὶ κατεφίλησαν ἀλλήλους. Ἀναβλέψας δὲ Βαροῦχ, εἶδε τὰ σῦκα ἐσκεπασμένα ἐν τῷ κοφίνῳ· καὶ ἄρας τοὺς ὀφθαλμοὺς αὐτοῦ εἰς τὸν οὐρανὸν, προσηύξατο λέγων· Ἔστι Θεὸς ὁ παρέχων μισθαποδοσίαν τοῖς ἀγίοις αὐτοῦ. Ἐτοιμάσων 3 σεαυτὴν, ἡ καρδιά μου, καὶ εὐφραίνου, καὶ ἀγάλλου ἐν τῷ 2 Cor. v. 1. σκηνώματί σου, λέγω τῷ σαρκικῷ οἴκῳ σου· τὸ πένθος σου γὰρ μετεστράφη εἰς χαράν. Ἐρχεται γὰρ ὁ ἱκανὸς, καὶ ἀρεῖ σε ἐκ τοῦ σκηνώματός σου. Οὐ γὰρ γέγονέ σοι ἁμαρτία. Ἀναψύξον ἡ παρθενική μου πίστις, καὶ πιστεύσον ὅτι ζήσεις. 4 Ἐπίβλεψον ἐπὶ τὸν κόφινον τοῦτον τῶν σύκων· ἰδοὺ γὰρ ἐξη- 5 κονταὲξ ἔτη ἐποίησαν, καὶ οὐκ ἐμαράνθησαν, οὐδὲ ὤξεσαν, ἀλλὰ στάζουσι τοῦ γάλακτος. Οὕτως γίνεται σοι ἡ σὰρξ μου, ἐὰν 6 ποιήσης τὰ προσταχθέντα σου ὑπὸ τοῦ ἀγγέλου τῆς δικαιοσύνης. Ὁ φυλάξας τὸν κόφινον τῶν σύκων, αὐτὸς πάλιν 7 φυλάξει σε ἐν τῇ δυνάμει αὐτοῦ. Ταῦτα εἰπὼν ὁ Βαροῦχ, 8 λέγει τῷ Ἀβιμέλεχ· Ἀνάστηθι, καὶ εὐζώμεθα, ἵνα γνωρίσῃ ἡμῖν ὁ Κύριος τὸ, πῶς δυνησώμεθα ἀποστεῖλαι τὴν φάσιν τῷ Ἱερεμίᾳ εἰς Βαβυλῶνα διὰ τὴν γενομένην σοι σκέπην. Καὶ 9 ηὔξατο Βαροῦχ, λέγων· Ἡ δύναμις ἡμῶν, ὁ Θεὸς ἡμῶν Κύριε, τὸ ἐκλεκτὸν φῶς, τὸ ἐξελθὼν ἐκ στόματος αὐτοῦ, παρακαλῶ καὶ δέομαί σου τῆς ἀγαθότητος· τὸ μέγα ὄνομα, ὃ οὐδεὶς δύναται γινῶναι· ἄκουσον τῆς φωνῆς τοῦ δούλου σου, καὶ γενοῦ γνωσῶς 10 ἐν τῇ καρδίᾳ μου. Τί θέλεις ποιήσωμεν; πῶς ἀποστείλω πρὸς

v. 2 ἀλλήλους (2°); b repeats *en tw θεωρ. αλλ.* | *αναβλεψας*; *aeth om* | *δε*; *ab om* | *Βαρουχ*; *ab add* τοις ὀφθαλμοῖς αὐτου (*b* τοὺς ὀφθ. α.) | *κοφινω*; *ab add* του *Αβιμελεχ* (*not c aeth*) | *aras ab*; *c (aeth)* ἐπηρεν | *προσηυξατο λεγων ab (aeth)*; *c ειπεν* | *εστιν ab*; *eis esstin o c*; *gross ist Gott aeth* | *αγιοις αὐτου c (aeth seinen Gerechten)*; *ab* τοις αγαπωσι σε | v. 3 η; *c om* | *αγαλλου ab*; *c αγαλλιασον* | *εν*; *c aeth λεγων* | *λεγω*; *c aeth om* | *οικω σου*; *c tw οικω σου αγιω* | *μετεστραφη*; *c μεταστραφητω*; *aeth μεταστραφησεται* | *γαρ (2°)*; *c om* | *arei*; *c erei* | *εκ τ. σκη*; *c. εν τω σκηνωματι*; *aeth und wird dich in deinen Körper zurückkehren lassen* | *γεγονε*; *c εγενετο εν*; *aeth omits clause* | v. 4 *ab* αναψυξον *εν τω σκηνωματι σου, εν τη παρθενικη σου ποιμνη*; *c αναστηθι αναστρεψον εις το ιδιον σου η παρθενικη μου πιστις*; *aeth schau auf deine Jungfräulichkeit des Glaubens* | *οτι*; *c kai* | v. 5 *τουτον ab (aeth)*; *c om* | v. 6 *προσταχθεντα σου ab (aeth deinen Befehl)*; *c προστεταχθεντα (!) σοι* | v. 8 *λεγει tw Αβ.*; *c ειπεν ο Αβ.*; *cf aeth, antwortete Abimelech und sagte zu ihm* | *το*; *c om* | *δυνησωμεθα ab*; *c δυναμεθα* | *φα- σου*; *c adds ταυτην (not aeth)* | *δια...σκεπην*; *ab δια την σκεπην την γενομενην σοι εν τη οδω*; *c δια την σκεπην σου*; *aeth die Beschützung mit der du mich bedeckt hast* | v. 9 *Βαρουχ*; *ab add* και *Αβιμελεχ* | *λεγων*; *ab λεγοντες* | *η δυναμις ημων ο θς ημων κε ab*; *ο θς κς η δυναμις μου c aeth (meine Kraft ist Gott, der Herr)* | *εκλεκτον*; *aeth om* | *εκ*; *c εκ του* | *παρακαλω και δεομαι c aeth*; *ab παρακαλουμεν και δεομεθα* | *της αγ.*; *c την αγαθοτητα* | *ονομα*; *ab add* σου | *γνωναι*; *c add αυτω* | v. 10 *του δουλου c aeth*; *ab των δουλων* | *μου c aeth*; *ab ημων* | *τι θε. ποιησ*; *ab τι ποιησωμεν*; *c εως αν το (sic) θελω ποιησω*; *aeth (?)* | *πως αποστ.*; *ab πως αποστειλωμεν*; *c εως αν αποστειλω*; *aeth und ich schicke.*

- 11 Ἱερემίαν εἰς Βαβυλῶνα ; Ἔτι δὲ προσευχομένου τοῦ Βαρούχ,
 12 ἰδοὺ ἄγγελος Κυρίου ἦλθε, καὶ λέγει τῷ Βαρούχ· Βαρούχ, ὁ
 σύμβουλος τοῦ φωτός, Μὴ μεριμνήσης τὸ, πῶς ἀποστεί-
 λης πρὸς Ἱερემίαν· ἔρχεται γὰρ πρὸς σε ὥρα τοῦ φωτός
 13 αὐρίου ἀेतός, καὶ σὺ ἐπισκέψῃ πρὸς Ἱερემίαν. Γράψον οὖν
 ἐν τῇ ἐπιστολῇ ὅτι, Δάλησον τοῖς υἱοῖς Ἰσραὴλ· Ὁ γενόμενος
 ἐν ὑμῖν ξένος, ἀφορισθήτω, καὶ ποιήσωσι ἰε' ἡμέρας· καὶ μετὰ
 14 ταῦτα εἰσάξω ὑμᾶς εἰς τὴν πόλιν ὑμῶν, λέγει Κύριος. Ὁ μὴ
 ἀφοριζόμενος ἐκ τῆς Βαβυλῶνος, ὃ Ἱερεμία, οὐ μὴ εἰσέλθῃ εἰς τὴν
 πόλιν· καὶ ἐπιτιμῶ αὐτοῖς, τοῦ μὴ ἀποδεχθῆναι αὐτοὺς αὐθις ὑπὸ
 15 τῶν Βαβυλωνιτῶν, λέγει Κύριος. Καὶ ταῦτα εἰπὼν ὁ ἄγγελος,
 16 ἀπῆλθεν ἀπὸ τοῦ Βαρούχ. Ὁ δὲ Βαρούχ ἀποστείλας εἰς τὴν
 ἀγορὰν τῶν ἐθνῶν, ἤνεγκε χάρτην καὶ μέλανα, καὶ ἔγραψεν
 17 ἐπιστολὴν περιέχουσαν οὕτως· Βαρούχ ὁ δοῦλος τοῦ Θεοῦ γράφει
 τῷ Ἱερεμία· Ὁ ἐν τῇ αἰχμαλωσίᾳ τῆς Βαβυλῶνος, χαίρει καὶ
 ἀγαλλιώ, ὅτι ὁ Θεὸς οὐκ ἀφῆκεν ἡμᾶς ἐξελθεῖν ἐκ τοῦ σώματος
 τούτου λυπουμένους διὰ τὴν πόλιν τὴν ἐρημωθεῖσαν καὶ ὑβρι-
 18 σθείσαν. Διὰ τοῦτο ἐσπλαγχνίσθη ὁ Κύριος ἐπὶ τῶν δακρύων
 ἡμῶν, καὶ ἐμνήσθη τῆς διαθήκης, ἧς ἔστησε μετὰ τῶν πατέρων
 19 ἡμῶν Ἀβραὰμ, καὶ Ἰσαὰκ, καὶ Ἰακώβ. Ἀπέστειλε γὰρ πρὸς
 με τὸν ἄγγελον αὐτοῦ, καὶ εἶπέ μοι τοὺς λόγους τούτους, οὓς
 20 ἀπέστειλα πρὸς σε. Οὗτοι οὖν εἰσὶν οἱ λόγοι, οὓς εἶπε Κύριος
 ὁ Θεὸς Ἰσραὴλ, ὁ ἐξαγαγὼν ἡμᾶς ἐκ γῆς Αἰγύπτου, ἐκ τῆς
 21 μεγάλης καμίνου· Ὅτι οὐκ ἐφυλάξατε τὰ δικαιώματά μου,
 ἀλλὰ ὑψώθη ἡ καρδία ὑμῶν, καὶ ἐτραχηλιάσατε ἐνώπιόν μου,
 ἐθυμώθη καὶ ἐν ὀργῇ παρέδωκα ὑμᾶς τῇ καμίνῳ εἰς Βαβυλῶνα.
 22 Ἐὰν οὖν ἀκούσητε τῆς· φωνῆς μου, λέγει Κύριος, ἐκ στόματος
 Ἱερεμίου τοῦ παιδός μου, ὁ ἀκούων, ἀναφέρω αὐτὸν ἐκ τῆς Βαβυ-
 λῶνος, ὁ δὲ μὴ ἀκούων, ξένος γενήσεται τῆς Ἱερουσαλὴμ καὶ

v. 10 Βαβυλωνα; ab add την φασιν ταυτην | v. 11 Βαρουχ (1°); ab add και του Αβι-
 μελχ | ηλθε; c om | λεγει; c ειπεν | Βαρουχ; ab add απαντας τους λογους τουτους |
 v. 12 Βαρουχ c aeth; ab om | φωτος; ab add λεγει | μεριμνησης c aeth; ab μεριμνη-
 σητε | αποστειλεις c aeth; ab αποστειλητε | γαρ; c om | προς; c τον | v. 13 λαλησον; c
 ειπατε | ο; c οτι | ξενος; c εξ ενος | v. 14 ω Ιερ.; ab om | επιτιμω α; bc επιτιμων | αυ-
 τους c; ab om | υπο; ab om | v. 15 και; c om | απηλθεν; c ανεχωρησεν | v. 16 ab
 αποστειλας δε εις την διασποραν των εθνων ηνεγκεν χαρτην και μελανα και εγραψεν
 επιστολην περιεχουσαν ουτως; c ο δε Βαρουχ απεστειλεν εις την αγοραν των εθνων και
 ηνεγκεν χαρτην και μελαν και εγρ. επ. λεγων οτι; aeth und Baruch geleitete ihn bis zur
 Strasse und holte Papier und Tinte und schrieb folgendermassen | v. 17 ο (2°); c om;
 aeth τω | αγαλλιω a; αγαλλιου b; αγαλλιασον c | v. 19 απεστειλα ab aeth; αποστειλω
 c | v. 20 εκ (2°); c om | v. 21 εθυμωθη c; om ab aeth | εν οργη και θυμω ab; c aeth
 om | v. 22 ουν; c om | αναφερω c (aeth); αφορισω ab | της Βαβ.; του λακκου της Βαβ.
 c | γενησεται; a γενηται; c γνωεται | και της Βαβ.; ab om; aeth und sie werden nicht

τῆς Βαβυλῶνος. Δοκιμάσεις δὲ αὐτοὺς ἐκ τοῦ ὕδατος τοῦ 23
 Ἰορδάνου· ὁ μὴ ἀκούων φανερὸς γενήσεται· τοῦτο τὸ σημεῖον
 ἐστὶ τῆς μεγάλης σφραγίδος.

VII. Καὶ ἀνέστη Βαρούχ, καὶ ἐξῆλθεν ἐκ τοῦ μνημείου. 1
 Καὶ ἀποκριθεὶς ἀνθρωπίνῃ φωνῇ ὁ αἰτὸς, εἶπε· Χαῖρε, Βαρούχ, 2
 ὁ οἰκονόμος τῆς πίστεως. Καὶ εἶπεν αὐτῷ Βαρούχ ὅτι, Ἐκλεκ- 3
 τὸς εἶ σὺ ὁ λαλῶν, ἐκ πάντων τῶν πετεινῶν τοῦ οὐρανοῦ· ἐκ
 τῆς γὰρ αὐγῆς τῶν ὀφθαλμῶν δῆλόν ἐστι. Δεῖξόν μοι οὖν, τί 4
 ποιεῖς ἐνταῦθα; Καὶ εἶπεν αὐτῷ ὁ αἰτὸς· Ἀπεστάλην ὧδε, ὅπως 5
 πᾶσαν φάσιν ἢν θέλεις, ἀποστείλῃς δι' ἐμοῦ. Καὶ εἶπεν αὐτῷ 6
 Βαρούχ· Εἰ δύνασαι σὺ ἐπᾶραι τὴν φάσιν ταύτην τῷ Ἱερεμίᾳ
 εἰς Βαβυλῶνα; Καὶ εἶπεν αὐτῷ ὁ αἰτὸς· Εἰς τοῦτο γὰρ καὶ 7
 ἀπεστάλην. Καὶ ἄρας Βαρούχ τὴν ἐπιστολὴν, καὶ δεκαπέντε 8
 σῦκα ἐκ τοῦ κοφίνου τοῦ Ἀβιμέλεχ, ἔδωκεν εἰς τὸν τράχηλον
 τοῦ αἰτοῦ, καὶ εἶπεν αὐτῷ· Σοὶ λέγω, βασιλεῦ τῶν πετεινῶν, 9
 ἄπελθε ἐν εἰρήνῃ μεθ' ὑγείας, καὶ τὴν φάσιν ἐνεγκόν μοι. Μὴ 10
 ὁμοιωθῇς τῷ κόρακι, ὃν ἐξαπέστειλε Νῶε, καὶ οὐκ ἀπεστράφη
 ἔτι πρὸς αὐτὸν εἰς τὴν κιβωτόν· ἀλλὰ ὁμοιωθήτι τῇ περιστερᾷ,
 ἣτις ἐκ τρίτου φάσιν ἤνεγκε τῷ δικαίῳ· οὕτω καὶ σὺ, ἄρον τὴν 11
 καλὴν φάσιν ταύτην τῷ Ἱερεμίᾳ καὶ τοῖς σὺν αὐτῷ, ἵνα εὖ σοι
 γένηται, ἄρον τὸν χάρτην τοῦτον τῷ λαῷ τῷ ἐκλεκτῷ τοῦ Θεοῦ.
 Ἐὰν κυκλώσωσί σε πάντα τὰ πτερινὰ τοῦ οὐρανοῦ, καὶ πάντες 12
 οἱ ἐχθροὶ τῆς ἀληθείας βουλόμενοι πολεμήσαι μετὰ σοῦ, ἀγώνι-
 σαι· ὁ Κύριος δώῃ σοι δύναμιν. Καὶ μὴ ἐκκλίνῃς εἰς τὰ δεξιὰ,
 μήτε εἰς τὰ ἀριστερὰ, ἀλλ' ὡς βέλος ὑπαγον ὀρθῶς, οὕτως ἄπελθε
 ἐν τῇ δυνάμει τοῦ Θεοῦ. Τότε ὁ αἰτὸς ἐπετάσθη, ἔχων τὴν 13

verbannt von Jerusalem in Babylon sein.

v. 23 δοκιμασῶ α; δοκημασεῖ b; δοκιμασῆς c (aeth) | γενησεται; c γινεται | το; ab om.

VII. 2 Text with ab aeth; c καὶ εἰπεν τὸν αἶτον καθέζομενον ἐκτος τοῦ μνημίου
 καὶ εἶπεν αὐτῷ ὁ αἶτος | πιστεως ab aeth; πολεως c | v. 3 αὐτῷ; c om | συ ο; c
 om | v. 4 οὖν; c om | εἶπεν αὐτῷ; ab om αὐτῷ | v. 5 απ. ab aeth; c ο θς ἀπεστειλεν
 με | ὧδε; ab add πρὸς σε | πα. φα.; c πρὸς πα. φα. | δι' ἐμου; c με | v. 6 εἶπεν;
 c λεγει | δυνασαι συ α; δυνη συ b; δυνηση c | επαραι; c αραι | εἶπεν; c λεγει | v. 7 εἰς;
 εγω εἰς ab | γαρ καὶ; ab om | v. 8 αὐτῷ; c om | v. 9 βασιλεῦς; c ο βασιλεὺς | πετεινων;
 c ορνων | ενεγκον c; ενεγκαι ab | v. 10 ἐτι πρὸς αὐτον; ab om (not c aeth) | v. 11 τοῖς συν
 αὐτῷ; c τοῖς δεσμοῖς αὐτου; aeth. die welcher von Israel bei ihm sind | τον χартην
 τουτον; sic ab; c aeth ταυτην την χαραν (aeth diese Freudenbotschaft | εκλεκτω;
 c καὶ τῷ εκλεκτῷ | v. 12 κυκλωσωσι; ab κυκλωσουσι | παντες...αληθειας c aeth; ab
 om | βουλομενοι; ab βουλονται | δωη ab aeth; δωση c | εἰς τα δεξια ac; δεξια b | μητε εἰς
 τα; ab η | υπαγον ορθως; a υπαγων ορ.; c υπαγων | ουτως; c aeth om | απελθε; c
 υπαγε | end of verse; ab add καὶ εσται η δοξα κυ εν παση τη οδω η πορευση (not
 c aeth).

ἐπιστολὴν, καὶ ἀπῆλθεν εἰς Βαβυλῶνα, καὶ ἀνεπαύσατο ἐπὶ τὴν
 ξύλον ἔξω τῆς πόλεως εἰς τόπον ἔρημον· ἐσιώπησε δὲ ἕως οὗ
 14 διήλθεν Ἰερემίας, αὐτὸς καὶ ἄλλοι τινὲς τοῦ λαοῦ· ἐξήρχοντο
 γὰρ θάψαι νεκρόν· καὶ γὰρ ᾗτήσατο Ἰερემίας παρὰ τοῦ Ναβου-
 χοδοנוόσορ, λέγων· Δός μοι τόπον, ποῦ θάψω τοὺς νεκροὺς τοῦ
 15 λαοῦ μου. Καὶ ἔδωκεν αὐτῷ. Ἀπερχομένων δὲ αὐτῶν καὶ
 κλαιόντων μετὰ τοῦ νεκροῦ, ἦλθον κατέναντι τοῦ αἵτου· καὶ
 ἔκραξεν ὁ αἵτος, λέγων· Σοὶ λέγω, Ἰερεμία ὁ ἐκλεκτὸς τοῦ Θεοῦ,
 ἀπελθε, σύναξον τὸν λαὸν ἅπαντα, καὶ ἔλθωσιν ὧδε, ἵνα ἀκου-
 σωσι τοῦ καλοῦ κηρύγματος, ὃ ἡνεγκά σοι ἀπὸ τοῦ Βαροῦχ καὶ
 16 τοῦ Ἀβιμέλεχ. Ἀκούσας δὲ ὁ Ἰερემίας, ἐδόξασε τὸν Θεόν·
 καὶ ἀπελθὼν συνῆξε τὸν λαὸν σὺν γυναιξὶ καὶ τέκνοις, καὶ
 17 ἦλθεν ὅπου ὁ αἵτος. Καὶ κατήλθεν ὁ αἵτος ἐπὶ τὸν τεθηγκότα,
 18 καὶ ἀνέζησε· γέγονε δὲ τοῦτο, ἵνα πιστεῦσωσιν. Ἐθαύμασε δὲ
 πᾶς ὁ λαὸς ἐπὶ τῷ γεγονότι, λέγοντες ὅτι, Μὴ οὗτος ἔστι ὁ Θεὸς
 ὁ ὀφθεῖς τοῖς πατράσιν ἡμῶν ἐν τῇ ἐρήμῳ διὰ Μαωσέως, καὶ
 ἐποίησεν ἑαυτὸν ἐν σχήματι αἵτου καὶ ἐφάνη ἡμῖν διὰ τοῦ
 19 μεγάλου αἵτου τούτου; Καὶ εἶπεν ὁ αἵτος τῷ Ἰερεμίᾳ, Δεῦρο
 λῦσον τὴν ἐπιστολὴν ταύτην, καὶ ἀνάγνωθι αὐτὴν τῷ λαῷ.
 20 Ἀύσας οὖν τὴν ἐπιστολὴν, ἀνέγνω τῷ λαῷ. Ἀκούσας οὖν ὁ λαὸς,
 ἔκλαυσαν, καὶ ἐπέθηκαν χοῦν ἐπὶ τὴν κεφαλὴν αὐτῶν· καὶ ἔλε-
 21 γον τῷ Ἰερεμίᾳ· Σῶσον ἡμᾶς καὶ ἀπάγγειλον ἡμῖν, τί ποιήσω-
 22 μεν, ἵνα εἰσέλθωμεν πάλιν εἰς τὴν πόλιν ἡμῶν; Ἀποκριθεὶς δὲ
 Ἰερემίας εἶπεν αὐτοῖς· Πάντα ὅσα ἐκ τῆς ἐπιστολῆς ἡκούσατε,

v. 13 ἐπιστολὴν; c adds εν τω τραχηλῳ αὐτου | ανεπαυστο c aeth; ελθων ανε-
 παυστο ab | τι ξυλον ab; c στυλου; aeth auf einer Säule and explains the τόπος
 ἔρημος as eine Stelle des unbebauten Landes | ου διηλθεν; c αν παρελθη | αὐτος κτέ;
 ab αὐτος γαρ και ο λαος εξηρχοντο; c αὐτος γαρ και αλλοι τινες του λαου· απηρχοντο
 γαρ | v. 14 νεκρον; ab add εξω της πολεως | και γαρ ητ.; c ητ. γαρ | του Ναβουχ.; ab
 του βασιλεως Ναβ. (not c aeth) | που c aeth; ab οπως | αὐτω; ab add ο βασιλευς |
 v. 15 κατεναντι; c εναντιον | σοι λεγω ab aeth; c om | απαντα c aeth; ab om |
 ελθωσιν ωδε; ab ελθε ενταυθα; aeth (?) es soll hieher kommen | του κ. κηρ. ο ην.
 aeth; c τ. κ. κη. του θυ ο ην.; ab ἐπιστολης ης ηνεγκα | του Βαρ. και του Αβ.; c Βαρ.
 και Αβ. | v. 17 και κατηλθεν ο αειτος; c om (ὁμοιοτ.) | ανεζησε; ab add και ανεστη | γεγονε
 δε τουτο ab; τουτο δε εγενετο c; aeth und dieses that er | v. 18 μη...θς c; ab εστιν θς;
 aeth vielleicht ist dies der Gott | και εποιησεν...τουτου c (aeth); ab και νυν εφανη
 ημιν δια του αειτου τουτου | v. 19 τω Ιερ.; ab σοι λεγω Ιερ. | αυτην τω λαω c aeth; ab eis
 τα ωτα του λαου | ανεγνω; c adds αυτην (not aeth) | v. 20 ακουσας ουν c (? aeth);
 ab ακουσαντες δε πας | εκλαυσεν ab aeth; εκλαυσεν c | επεθηκαν ab aeth; επεθηκεν
 c | την κεφαλ. αυτων aeth; ab τας κεφαλας αυτων; c την κεφαλην αὐτου | v. 21 σωσον
 ημας και c aeth (rette uns!) | ab om | ινα; c πως | παλιν; c om | v. 22 αποκρ. δε Ιερ.
 ειπεν αυτοις c; ab και ειπεν προς αυτους; aeth und Jeremias erhob sich und sagte zu
 ihnen | εκ της επιστολης; ab om (not c aeth) | ηκουσατε; c om.

φυλάξατε· καὶ εἰσάξει ἡμᾶς εἰς τὴν πόλιν ἡμῶν. Ἐγραψε δὲ καὶ 23
ἐπιστολὴν ὁ Ἱερεμίας πρὸς Βαροῦχ, οὕτως λέγων· Τίέ μου ἀγα-
πητέ, μὴ ἀμελήσης ἐν ταῖς προσευχαῖς σου δεόμενος ὑπὲρ ἡμῶν
ὅπως κατενοδύσῃ τὴν ὁδὸν ἡμῶν, ἄχρις ἂν ἐξέλθωμεν ἐκ τῶν
προσταγμάτων τοῦ ἀνόμου βασιλέως τούτου· δίκαιος γὰρ εὐρέ-
θης ἐναντίον αὐτοῦ καὶ οὐκ ἔασέν σε εἰσελθεῖν ἐνταῦθα μεθ’
ἡμῶν, ὅπως μὴ ἴδῃς τὴν κάκωσιν τὴν γενομένην τῷ λαῷ ὑπὸ τῶν
Βαβυλωνίων· ὥσπερ γὰρ πατὴρ, υἱὸν μονογενὴ ἔχων, τούτου δὲ 24
παραδοθέντος εἰς τιμωρίαν· οἱ οὖν ἰδόντες τὸν πατέρα αὐτοῦ,
καὶ παραμυθούμενοι αὐτὸν, σκέπουσιν τὸ πρόσωπον αὐτοῦ, ἵνα
μὴ ἴδῃ πῶς τιμωρεῖται αὐτὸς ὁ υἱὸς καὶ πλείονα φθαρῇ ἀπὸ τῆς
λύπης· οὕτως γὰρ σε ἐλέησεν ὁ Θεὸς καὶ οὐκ ἔασέν σε ἔλθεῖν εἰς
Βαβυλῶνα· ἵνα μὴ ἴδῃς τὴν κάκωσιν τοῦ λαοῦ· ἀφ’ ἧς γὰρ
εἰσήλθομεν εἰς τὴν πόλιν ταύτην, οὐκ ἐπαύσατο ἡ λύπη ἀφ’
ἡμῶν, ἐξήκοντα καὶ ἑξ ἔτη σήμερον. Πολλάκις γὰρ ἐξερχώμε- 25
νος ἠΐρισκον ἐκ τοῦ λαοῦ κρεμαμένους ὑπὸ Ναβουχοδονόσορ
βασιλέως, κλαίοντας καὶ λέγοντας, Ἐλέησον ἡμᾶς, ὁ θεὸς Ζάρ.
Ἀκούων ταῦτα, ἔλνυπούμην καὶ ἔκλαιον δισσοῦν κλαυθμόν· οὐ 26
μόνον ὅτι ἐκρέμαντο, ἀλλ’ ὅτι ἐπεκαλοῦντο θεὸν ἀλλότριον· λέ-
γοντες, Ἐλέησον ἡμᾶς. Ἐμνημόνευον δὲ ἡμέρας ἐορτῆς ἃς ἐποιοῦ-
μεν ἐν Ἱερουσαλὴμ· πρὸ τοῦ ἡμᾶς αἰχμαλωτευθῆναι. Καὶ μνησ- 27
κόμενος ἐστέναζον, καὶ ἐπέστρεφον εἰς τὸν οἶκόν μου ὀδυνώμενος
καὶ κλαίων. Νῦν οὖν δεήθητι, εἰς τὸν τόπον ὅπου εἶ, σὺ καὶ Ἀβιμέ- 28
λεχ, ὑπὲρ τοῦ λαοῦ τούτου, ὅπως εἰσακούσωσιν τῆς φωνῆς μου
καὶ τῶν κριμάτων τοῦ στόματός μου καὶ ἐξέλθωμεν ἐντεῦθεν.
Λέγω γάρ σοι, ὅτι ὅλον τὸν χρόνον ὃν ἐποιήσαμεν ἐνταῦθα, 29

v. 22 *ημᾶς*; *ab* add *Κυριος*; not *c* *aeth* | for vv. 23...26; the text of *ab* is very confused and varies a good deal from that which we have adopted from *c* *aeth*; it runs as follows: ἔγραψε δε Ἱερεμίας ἐπιστολὴν εἰς Ἱερουσαλὴμ πρὸς Βαροῦχ καὶ Ἀβιμελεχ ἐνώπιον παντός του λαοῦ, τὰς θλίψεις τὰς (b om) γινόμενας εἰς αὐτοὺς το πῶς παρεληφθήσαν ὑπο του βασιλεως των χαλδαιων· καὶ το πῶς ἕκαστος τον πατερα αὐτου ἐθεωρει δεσμευομενον καὶ πατηρ τεκνον παραδοθεν (b παραδοθεντα) εἰς τιμωριαν· οἱ δε θελοντες παραμυθησασθαι τον πατερα αὐτου ἐσκεπον το προσωπον αὐτου ἵνα μη ἴδῃ τον υἱον αὐτου τιμωρουμενον· καὶ ὁ θεος ἐσκεπασεν σε καὶ Ἀβιμελεχ· ἵνα μη ἴδῃται ἡμᾶς τιμωρουμενους | v. 23 κατενοδευση; c κατενοδοση | δικαιος γαρ ευρεθης; c δικαιοι γαρ ευρεθησαν; *aeth* du aber hast Gerechtigkeit vor Gott gefunden | μεθ’ ἡμων *aeth*; c om | v. 24 φθαρη; c φθαρει | ουτως; c ουτος | εἰς την πολιν ταυτην *aeth*; ενταυθα c | v. 25 κρεμαμενους; c κρεμμαμενους | Ζάρ (= Heb זר, αλλοτριος); c Σαβαωθ; *ms* *aeth* Zar, Sorot, Sarot | v. 27 οδυνωμενος (c) *aeth*; οδυρομενος *ab* | v. 28 νυν ουν δεη. c *aeth*; *ab* δεηθητι ουν | εἰς τον τοπον οπου εἰ c *aeth* (wo ihr seid); *ab* om | εἰσακουσωσιν...στοματος μου c *aeth*; *ab* εἰσακουσθη η δεησις υμων | κριματων; *aeth* ρηματων (das Wort) | καὶ ἐξ. εν. *ab*: c ἐξελθωσιν ενταυθα | v. 29 ολον; *ab* om (not c *aeth*).

- κατέχουσιν ἡμᾶς λέγοντες ὅτι, Εἴπατε ἡμῖν ῥῶδην ἐκ τῶν ῥῶδων Σιών, καὶ τὴν ῥῶδην τοῦ Θεοῦ ὑμῶν. Καὶ ἀντελέγο-
 30 μεν αὐτοῖς, Πῶς ἄσωμεν ὑμῖν ἐπὶ γῆς ἀλλοτρίας ὄντες; Καὶ μετὰ ταῦτα ἔδωκε τὴν ἐπιστολὴν εἰς τὸν τράχηλον τοῦ αἵτου, λέγων, Ἐπελθε ἐν εἰρήνῃ, ἐπισκέψηται Κύριος ἀμφοτέρους.
 31 Καὶ ἐπετάσθη ὁ αἵτος, καὶ ἤνεγκεν τὴν ἐπιστολὴν καὶ ἔδωκε τῷ Βαρούχ. Καὶ λύσας ἀνέγνω, καὶ κατεφίλησεν αὐτήν, καὶ ἔκλαυσε ἀκούσας διὰ τὰς λύπας καὶ τὰς κακώσεις τοῦ
 32 λαοῦ. Ἰερემίας δὲ ἄρας τὰ σῦκα, διέδωκε τοῖς νοσοῦσι τοῦ λαοῦ. Καὶ ἔμεινε διδάσκων αὐτοὺς τοῦ ἀπέχεσθαι ἐκ τῶν ἀλισγημάτων τῶν ἐθνῶν τῆς Βαβυλῶνος.
- 1 VIII. Ἐγένετο δὲ ἡ ἡμέρα, ἐν ᾗ ἐξέφερε ὁ Θεὸς τὸν λαὸν
 2 ἐκ Βαβυλῶνος· καὶ εἶπεν ὁ Κύριος πρὸς Ἰερემίαν· Ἀνάστηθι, σὺ καὶ ὁ λαὸς, καὶ δεῦτε ἐπὶ τὸν Ἰορδάνην, καὶ ἐρεῖς τῷ λαῷ, Ὁ θέλων τὸν Κύριον καταλειψάτω τὰ ἔργα τῆς Βαβυλῶνος, καὶ τοὺς ἄρρενας τοὺς λαβόντας ἐξ αὐτῶν γυναῖκας, καὶ τὰς
 3 γυναῖκας τὰς λαβούσας ἐξ αὐτῶν ἄνδρας. Καὶ διαπεράσωσιν οἱ ἀκούοντές σου, καὶ ἄρουν αὐτοὺς εἰς Ἱερουσαλὴμ· τοὺς δὲ μὴ
 4 ἀκούοντάς σου, μὴ εἰσαγάγῃς αὐτοὺς εἰς αὐτήν. Ἰερემίας δὲ ἐλάλησεν αὐτοῖς τὰ ῥήματα ταῦτα· καὶ ἀναστάντες ἦλθον ἐπὶ τὸν Ἰορδάνην τοῦ περᾶσαι, λέγων αὐτοῖς τὰ ῥήματα, ἃ εἶπε Κύριος πρὸς αὐτόν. Καὶ τὸ ἥμισυ τῶν γαμησάντων ἐξ αὐτῶν οὐκ ἠθέ-

v. 29 κατ. ημ. c aeth; ab ελεγον | και την; aeth καινην (sagt uns einen neuen Gesang) | υμων; b ημων | αντελεγομεν ab; λεγωμεν c (? aeth) | υμιν c aeth; ab την ρωδην κυριου | v. 30 αετου; ab add Ιερემιας | κυριος αμφοτερους ab; c υμας αμφοτ. ο κς | v. 31 επετασθη ab aeth; c om | αετος; ab add και ηλθεν εις (b om) Ιερουσαλημ | και ην... Βαρουχ c, adding ο αετος after ηνεγκεν; ab και εδωκε την επιστολην Βαρουχ; aeth και ηνεγκε την επιστολην τω Βαρουχ | εκλαυσε ab aeth; c εμεινε κλαιων | του λαου ab aeth; c αυτων | v. 32 διεδωκε ab; εδωκε c (? aeth) | διδασκων; e ενδιδασκων (sic) | αλισγηματων ab (α αλγηματων); c πραγματων; aeth das Thun und Treiben.

VIII. 1 ο θεος c aeth; ab κυριος | λαον; ab add αυτου (not c aeth) | προς Ιερεμιαν ab; τω Ιερεμια c | end of verse ab add λεγων | v. 2 επι τον; a προς τον | τα εργα; c aeth add των εθνων (from VII. 32) | λαβοντας ab; c (aeth) γαμησαντας | λαβουσας ab; c (? aeth) γαμησαντας (sic) | v. 3 διαπερασωσιν ab; περασωσιν c | σου; b σοι | τους δε μη ακουοντας ab; οι δε μη ακουοντες c | εισαγαγης ab; ενεγκης c | εις αυτην c aeth; εκει ab | v. 4 αυτοις c aeth; ab προς τον λαον | ανασταντες ηλθον ab; ηνεγκεν αυτους c; aeth (?) | κυριος προς αυτον; c αυτω ο Κυριος | και το ημισυ; at this point the text of c abruptly drops from its level of excellence, and the manuscript ends with trivial matter chiefly taken from the Septuagint; perhaps his copy was imperfect after the word γαμησαντων; at all events his text proceeds as follows: και το ημισυ των γαμησαντων ἐξ αὐτων ἄρω καὶ στησω αὐτοῖς διαθηκὴν αἰωνιον του εἶναι με αὐτοῖς εἰς θεον· καὶ αὐτοὶ ἐσονται μοι εἰς λαον· καὶ οὐ κινήσω τον λαον μου Ἰσραηλ ἀπο της γης ἧς ἔδωκα αὐτοῖς· Κυριε, παντοκρατωρ, ὁ θεος Ἰσραηλ· ψυχὴ ἐν στενοῖς καὶ πνεῦμα ἀκηδιον ἐκε-

λησαν ἀκούσαι τοῦ Ἱερεμίου, ἀλλ' εἶπον πρὸς αὐτόν· Οὐ μὴ καταλείψωμεν τὰς γυναῖκας ἡμῶν εἰς τὸν αἰῶνα· ἀλλ' ὑποστρέψωμεν αὐτὰς μεθ' ἡμῶν εἰς τὴν πόλιν ἡμῶν. Ἐπέρασαν οὖν 5 τὸν Ἰορδάνην, καὶ ἦλθον εἰς Ἱερουσαλήμ. Καὶ ἔστη Ἱερεμίας, καὶ Βαροὺχ καὶ Ἀβιμέλεχ, λέγοντες ὅτι, Πᾶς ἄνθρωπος κοινῶν Βαβυλωνίταις οὐ μὴ εἰσέλθῃ εἰς τὴν πόλιν ταύτην. Καὶ 6 εἶπον πρὸς αὐτούς· Ἀναστάντες ὑποστρέψωμεν εἰς Βαβυλῶνα εἰς τὸν τόπον ἡμῶν. Καὶ ἐπορεύθησαν. Ἐλθόντων δὲ αὐτῶν 7 εἰς Βαβυλῶνα, ἐξήλθον οἱ Βαβυλωνῖται εἰς συνάντησιν αὐτῶν, λέγοντες· Οὐ μὴ εἰσέλθῃτε εἰς τὴν πόλιν ἡμῶν, ὅτι ἐμισήσατε ἡμᾶς, καὶ κρυφῇ ἐξήλθετε ἀφ' ἡμῶν· διὰ τοῦτο οὐκ εἰσελεύ-

κραγεν πρὸς σε· ἀκούσον, κυριε, καὶ ἔλεσον· ὅτι θεὸς ἔλεων· καὶ ἔλεσον ὅτι ἁμαρτανῶμεν ἐναντίον σου· ὅτι σοι καθήμενος τὸν αἰῶνα ἡμεῖς ἀπολλυμενοι τὸν αἰῶνα· κυριε, παντοκράτωρ, ὁ θεὸς Ἰσραὴλ, ἀκούσον δὴ τῆς προσευχῆς τῶν τεθνηκότων Ἰσραὴλ καὶ υἱὸν τῶν ἁμαρτανῶντων ἐναντίον σου· οἱ οὐκ ἤκουσαν τῆς φωνῆς θεοῦ αὐτῶν καὶ ἐκολληθῆσαν ἡμῖν τα κακα· μὴ μνησθῆς (cod μνησθεῖς) ἀδικίων πατέρων ἡμῶν· ἄλλα μνησθῇ χειρὸς σου καὶ ὀνόματος σου ἐν τῷ καιρῷ τούτῳ· ἐγενετο δὲ μετὰ τὴν συμπληρωσιν τῶν ἐβδομηκοντα ἔτων μεχρι τοῦ βασιλευσαι Περσας ἐν τῷ πρώτῳ ἔτει (cod ἔτη) Κυρίου βασιλεως Περσῶν· του τελεσθῆναι λογον Κυρίου ἀπο στοματος Ἱερεμίου ἐξηγειρεν κυριος τὸ πνευμα Κυροῦ βασιλεως Περσῶν· καὶ παρηγγειλεν φωνῇ ἐν πασῇ τῇ βασιλείᾳ αὐτοῦ καὶ ἅμα δια- γραπτῶν λεγει· Ταδε λεγει Κυρος (cod K.) ὁ βασιλεὺς Περσῶν· πᾶσας τὰς βασιλείας τῆς γῆς (cod om) ἔδωκεν μοι κυριος ὁ θεὸς τοῦ οὐρανοῦ· καὶ αὐτὸς ἐπεσκεψατο ἐπ' ἐμέ· του οἰκοδομῆσαι αὐτῷ (cod αὐτὸν) οἶκον· ἐν Ἱερουσαλὴμ τῇ ἐν τῇ Ἰουδαίᾳ· ἥτις οὖν ἐστὶν ἐκ τοῦ ἔθνους αὐτοῦ ἔστω ὁ Κυριος αὐτοῦ μετὰ αὐτοῦ· καὶ ἀναβας εἰς τὴν Ἱερουσαλὴν τὴν (cod τῆν) ἐν τῇ Ἰουδαίᾳ οἰκοδομεῖτω (cod οἰκοδομῇ) του οἶκον του θεοῦ Ἰσραὴλ· οὗτος (cod οὗτως) ὁ Κυριος ὁ κατασκευῶσας ἐν Ἱερουσαλὴμ· καὶ ὁ βασιλεὺς Κυρος ἐξηνεγκεν τὰ ἅγια σκευῇ (cod σκευεῖ) του Κυρίου· ἃ μετῆγαγεν Ναβουχοδονοσωρ ἐξ Ἱερουσαλὴμ. καί... (cod ἀπηρεσάτω) αὐτὰ ἐν τῷ εἰδωλίῳ αὐτοῦ· ἐξηνεγκεν τὰ πάντα Κυρος ὁ βασιλεὺς Περσῶν καὶ παρεδωκεν αὐτὰ Μιθριδατῇ (cod Μηθρηδατῇ) τῷ ἐαυτοῦ γαζοφυλακί (cod γαζοφυλακῇ)· δια τούτου δὲ παρεδοθησαν Σαραβαρῷ προστατῇ τῆς Ἰουδαίας· ἅμα Ζορὼβαβελ ὃς (cod ὡς) καὶ ἡτήσατο ἐπὶ Δαριου βασιλεως Περσῶν τὴν οἰκοδομὴν του ναοῦ. ἦν γὰρ κωλύσας ἐπὶ τὸν Ἀρταξερξοῦ χρόνον ὡς ἴστωρσε Ἐσδρας· τῷ δευτέρῳ ἔτει (cod ἔτη) παραγενομενος εἰς τὸ ἱερον του θεοῦ εἰς Ἱερουσαλὴμ μῆνος δευτερου ἤρξατο Ζορὼβαβελ ὁ του Ραθααηλ καὶ Ἰησοῦς ὁ του Ἰωσεφ καὶ οἱ ἀδελφοὶ αὐτῶν καὶ οἱ ἱερεῖς καὶ οἱ Λευῖται καὶ πάντες οἱ παραγενομενοι ἐκ τῆς αἰχμαλωσίας εἰς Ἱερουσαλὴμ· καὶ ἐθεμελιωσαν τὸν οἶκον του θεοῦ τῇ νομῇ τῶν δευτερου μῆνος· ἐν τῷ ἔλθῃ εἰς τὴν Ἰουδαίαν καὶ Ἱερουσαλὴμ· προφήτευσαν Ἀγγεοὺ καὶ Ζαχαριου υἱοῦ Ἀδδῶν· τελευταῖον (cod τελευτεων) προφήτων· ἀνέβη δὲ ὁ Ἐσδρας ἐκ Βαβυλωνος ὡς γραμματεὺς εὐφῆς ὧν ἐν τῷ Μωυσεως νομῷ· ὃς (cod ὡς) καὶ ἐπιστημὴν πολλὴν εἶχεν τῷ διδασκεῖν αὐτὸν (cod αὐτῷ) ἅπαντα τὸν λαὸν τὰ δικαιώματα καὶ τὰ κρίματα ἐπὶ τὸν Ἀρταξερξοῦ χρόνον· καὶ ἐποίησαν ἐγκαινία του οἴκου του θεοῦ, ὑμνοῦντες καὶ εὐλογοῦντες τῷ κυρίῳ ἐπὶ τῇ ἐγερσει του οἴκου του θεοῦ.

v. 4 εἰς τὴν πόλιν ἡμῶν aeth; ad eis Βαβυλῶνα | v. 5 κοινῶν; ὁ κοινῶν | ταυτην; aeth ἡμῶν | v. 6 καὶ εἶπον; aeth adds οἱ γαμῆσαντες γυναῖκας (welche eine Weib geheiratet hätten) | εἰς τὸν τόπον ἡμῶν; aeth om | ἐπορεύθησαν; aeth adds καὶ ὑπεστρέψαν | v. 7 οὐ μὴ...ἡμῶν; aeth om | ἐμισήσατε; aeth adds vorher.

σεσθε πρὸς ἡμᾶς. "Ορκῶ γὰρ ὠρκίσασμεν ἀλλήλους κατὰ τοῦ
 ὀνόματος τοῦ θεοῦ ἡμῶν, μήτε ὑμᾶς μήτε τέκνα ὑμῶν δέξασθαι,
 8 ἐπειδὴ κρυφῇ ἐξήλθετε ἀφ' ἡμῶν. Καὶ ἐπιγυνόντες ὑπέστρεψαν
 καὶ ἦλθον εἰς τόπον ἔρημον μακρόθεν τῆς Ἱερουσαλὴμ, καὶ
 ὠκοδόμησαν ἑαυτοῖς πόλιν, καὶ ἐπωνόμασαν τὸ ὄνομα αὐτῆς
 9 Σαμάρειαν. Ἀπέστειλε δὲ πρὸς αὐτοὺς Ἱερεμίας, λέγων
 Μετανοήσατε· ἔρχεται γὰρ ἄγγελος τῆς δικαιοσύνης, καὶ εἰσ-
 ἄξει ὑμᾶς εἰς τὸν τόπον ὑμῶν τὸν ὑψηλόν.

1 IX. Ἐμειναν δὲ οἱ τοῦ Ἱερεμίου, χαίροντες καὶ ἀναφέροντες
 2 θυσίαν ὑπὲρ τοῦ λαοῦ ἐννέα ἡμέρας. Τῇ δὲ δεκάτῃ ἀνῆνεγκεν
 3 Ἱερεμίας μόνος θυσίαν, καὶ ἠΐξατο εὐχὴν, λέγων "Ἄγιος, ἄγιος,
 ἄγιος· τὸ θυμίαμα τῶν δένδρων τῶν ζώντων, τὸ φῶς τὸ ἀληθινόν Joh. i. 9.
 τὸ φωτίζειν με, ἕως οὗ ἀναληφθῶ πρὸς σέ, περὶ τῆς φωνῆς τῆς
 4 γλυκείας τῶν δύο Σεραφίμ. Παρακαλῶ ὑπὲρ ἄλλης εὐωδίας
 5 θυμιάματος· καὶ ἡ μελέτη μου Μιχαὴλ ὁ ἀρχάγγελος τῆς
 6 δικαιοσύνης, ἕως ἂν εἰσενέγκῃ τοὺς δικαίους. Παρακαλῶ σε,
 Κύριε παντοκράτωρ πάσης κτίσεως, ὁ ἀγέννητος καὶ ἀπερι-
 νόητος, ᾧ πᾶσα κρίσις κέκρυπται ἐν αὐτῷ πρὸ τοῦ ταῦτα
 7 γενέσθαι. Ταῦτα λέγοντος τοῦ Ἱερεμίου, καὶ ἵσταμένου ἐν
 τῷ θυσιαστηρίῳ μετὰ Βαροὺχ καὶ Ἀβιμέλεχ, ἐγένετο ὡς εἰς
 8 τῶν παραδιδόντων τὴν ψυχὴν αὐτοῦ. Καὶ ἔμειναν Βαροὺχ
 καὶ Ἀβιμέλεχ κλαίοντες, καὶ κράζοντες μεγάλῃ τῇ φωνῇ ὅτι,
 Ὁ πατὴρ ἡμῶν Ἱερεμίας κατέλιπεν ἡμᾶς, ὁ ἱερεὺς τοῦ Θεοῦ,
 9 καὶ ἀπῆλθεν. Ἦκουσε δὲ πᾶς ὁ λαὸς τοῦ κλαυθμοῦ αὐτῶν,
 καὶ ἔδραμον ἐπ' αὐτοὺς πάντες, καὶ εἶδον Ἱερεμίαν ἀνακείμενον
 χαμαὶ τεθυνηκότα· καὶ διέρρηξαν τὰ ἱμάτια αὐτῶν, καὶ ἐπέθηκαν
 χοῦν ἐπὶ τὰς κεφαλὰς αὐτῶν, καὶ ἔκλαυσαν κλαυθμὸν πικρόν.
 10 Καὶ μετὰ ταῦτα ἡτοίμασαν ἑαυτοὺς, ἵνα κηδεύσωσιν αὐτόν.

v. 7 προς ημας; aeth eis την πολιν ημων.

IX. 1 οι του Ιερεμιου; aeth om | εννεα; aeth επτα | v. 3 το θυμαμα...ζωντων; aeth
 angenehmer Wohlgeruch den Menschen | προς σε; aeth ich flehe dich an wegen deines
 Volkes und ich bitte dich | v. 4 παρακαλω υπερ (b περι)...θυμιαματος; aeth und um
 des Weihrauchduftes der Cherubim (και περι ευωδιας θυμιαματος των χειρουβιμ) |
 v. 5 aeth ich bitte dich dass doch ja der gesangskundige Michael, der Engel der
 Gerechtigkeit ist er, die Pforten der Gerechtigkeit offen halte, bis sie in dieselben
 einziehen | v. 6 Κυριε; b om | κυριε...γενεσθαι; aeth Herr über alles und Herr welcher
 alles umfasst und alles erschaffen hat, welcher erscheint und welcher nicht geboren
 ist, welcher alles vollendet hat und bei dem die ganze Schöpfung verborgen war, ehe
 die Dinge im Verborgenen gemacht wurden | v. 7 ταυτα...Ιερεμιου; aeth und dies
 betete er und als er sein Gebet geendet hatte | v. 8 και εμειναν; aeth und alsbald
 fielen B. und A. nieder.

Καὶ ἰδοὺ φωνὴ ἦλθε, λέγουσα· Μὴ κηδεύετε τὸν ἔτι ζῶντα· 11
 ὅτι ἡ ψυχὴ αὐτοῦ εἰσέρχεται εἰς τὸ σῶμα αὐτοῦ πάλιν. Καὶ 12
 ἀκούσαντες τῆς φωνῆς, οὐκ ἐκήδευσαν αὐτὸν, ἀλλ' ἔμειναν
 περικύκλω τοῦ σκηνώματος αὐτοῦ ἡμέρας τρεῖς, λέγοντες καὶ
 ἀποροῦντες, ποῖα ὥρα μέλλει ἀναστῆναι. Μετὰ δὲ τρεῖς ἡμέρας 13
 εἰσῆλθεν ἡ ψυχὴ αὐτοῦ εἰς τὸ σῶμα αὐτοῦ· καὶ ἐπῆρε τὴν
 φωνὴν αὐτοῦ ἐν μέσῳ πάντων, καὶ εἶπε· Δοξάσατε τὸν Θεόν,
 πάντες δοξάσατε τὸν Θεόν, καὶ τὸν Υἱὸν τοῦ Θεοῦ τὸν ἐξυπνί-
 ζοντα ἡμᾶς Ἰησοῦν Χριστὸν, τὸ φῶς τῶν αἰώνων πάντων, ὁ
 ἄσβεστος λύχνος, ἡ ζωὴ τῆς πίστεως. Γίνεται δὲ μετὰ τοὺς 14
 καιροὺς τούτους ἄλλα ἔτη τετρακόσια ἐβδομηκονταεπτὰ, καὶ
 ἔρχεται εἰς τὴν γῆν· καὶ τὸ δένδρον τῆς ζωῆς τὸ ἐν μέσῳ τοῦ
 παραδείσου φυτευθὲν ποιήσει πάντα τὰ δένδρα τὰ ἄκαρπα
 ποιῆσαι καρπὸν, καὶ αὐξηθήσονται, καὶ βλαστήσουσι, * καὶ
 ὁ καρπὸς αὐτῶν μετὰ τῶν ἀγγέλων μενεῖ.* Καὶ τὰ βεβλα- 15
 στηκότα, καὶ μεγαλαυχούντα, καὶ λέγοντα, Ἐδώκαμεν τὸ
 τέλος ἡμῶν τῷ ἀέρι· ποιήσει αὐτὰ ξηρανθῆναι μετὰ τοῦ ὕψους
 τῶν κλάδων αὐτῶν· καὶ ποιήσει αὐτὰ κλιθῆναι* τὸ δένδρον
 τὸ στηριχθέν· καὶ ποιήσει τὸ κόκκινον ὡς ἔριον λευκὸν γενέσθαι.
 Ἡ χιὼν μελανθήσεται, τὰ γλυκέα ὕδατα ἀλμυρὰ γεγῆσονται 16
 ἐν τῷ μεγάλῳ φωτὶ τῆς εὐφροσύνης τοῦ Θεοῦ. Καὶ εὐλογήσει 17
 τὰς νήσους τοῦ ποιῆσαι καρπὸν ἐν τῷ λόγῳ τοῦ στόματος τοῦ
 Χριστοῦ αὐτοῦ. Αὐτὸς γὰρ ἐλεύσεται, καὶ ἐξελεύσεται, καὶ 18
 ἐπιλέξεται ἑαυτῷ δώδεκα ἀποστόλους, ἵνα εὐαγγελίζωνται ἐν
 τοῖς ἔθνεσιν· ὃν ἐγὼ ἐώρακα κεκοσμημένον ὑπὸ τοῦ Πατρὸς
 αὐτοῦ, καὶ ἐρχόμενον εἰς τὸν κόσμον ἐπὶ τὸ ὄρος τῶν ἐλαιῶν·
 καὶ ἐμπλήσει τὰς πεινώσας ψυχάς. Ταῦτα λέγοντος τοῦ 19

v. 11 κηδευετε; b κηδευσατε; aeth wickelt ihn nicht in Leinen; so in v. 12 |
 v. 12 εμειναν...αναστηναι; aeth sassen indem sie um ihn drei Tage wachten bis
 seine Seele in seinen Körper zurückkehrte | v. 13 μετα...φωνην αυτου; aeth und eine
 Stimme erscholl | τον θεον (2°); aeth τον χριστον (den Gesalbten) | εξυπνιζοντα;
 aeth auferwecken und richten | v. 14 ετη τετρ. εβδ. ab; aeth 303 (codd. 330, 333)
 Wochen von Tagen | και το δενδρον aeth; των δενδρων ab | φυτευθεν; aeth war
 und nicht gepflanzt war | και...μενει; ab om; aeth und ihre Frucht wird bei
 den Engeln wohnen | v. 15 βεβλαστηκοτα; a βεβληκοτα | μετα...κλιθηναι (b κρι-
 θηναι); a om | the whole verse thus in aeth; und um der Pflanzschule der Bäume
 willen, damit sie grün werden und hoch wachsen, wollen wie der Luft Verherrlichung
 spenden damit ihre Wurzeln nicht ausdürren wie eine Pflanze deren Wurzel nicht
 Boden gefasst hat | και ποιησει aeth; και ab | ως aeth; και ab | v. 16 τα γλυκεα...γενη-
 σονται; aeth adds και τα αλμυρα γλυκεα γενησονται | εν...θεου; aeth mit grossem
 Frohlocken und die Freuden Gottes | v. 17 χριστον; aeth υιου | v. 18 ινα ευαγ. ...
 εωρακα; aeth damit ihnen gezeigt werde was ich gesehen habe | κεκοσμημενον ab;
 aeth geschickt | πεινωσας a aeth; ταπεινωσας b.

Ἱερεμίου περὶ τοῦ Υἱοῦ τοῦ Θεοῦ, ὅτι ἔρχεται εἰς τὸν κόσμον,
 20 ὥργισθη ὁ λαὸς, καὶ εἶπε· Ταῦτα πάλιν ἐστὶ τὰ ῥήματα τὰ
 ὑπὸ Ἡσαίου τοῦ υἱοῦ Ἀμὼς εἰρημένα, λέγοντος ὅτι, Εἶδον
 21 τὸν Θεόν, καὶ τὸν Υἱὸν τοῦ Θεοῦ. Δεῦτε οὖν, καὶ μὴ ἀποκτείνωμεν
 αὐτὸν τῷ ἐκείνου θανάτῳ, ἀλλὰ λίθοις λιθοβολήσωμεν
 22 αὐτόν. Ἐλυπήθησαν σφόδρα ἐπὶ τῇ ἀπουσίᾳ ταύτῃ Βαροὺχ
 καὶ Ἀβιμέλεχ, καὶ ὅτι ἤθελον ἀκοῦσαι πλήρης τὰ μυστήρια,
 23 ἃ εἶδε. Λέγει δὲ αὐτοῖς Ἱερεμίας· Σιωπήσατε, καὶ μὴ κλαίετε·
 οὐ μὴ γάρ με ἀποκτείνωσιν, ἕως οὗ πάντα ὅσα εἶδον διηγῆ-
 24 σμαι ὑμῖν. Εἶπε δὲ αὐτοῖς· Ἐνέγκατέ μοι λίθον. Ὁ δὲ ἔστησεν
 25 αὐτόν, καὶ εἶπε· Τὸ φῶς τῶν αἰώνων, ποιήσον τὸν λίθον τούτον
 26 καθ' ὁμοιότητά μου γενέσθαι. Ὁ δὲ λίθος ἀνέλαβεν ὁμοιότητα
 27 τοῦ Ἱερεμίου. Καὶ ἐλιθοβόλουν τὸν λίθον, νομίζοντες ὅτι
 28 Ἱερεμίας ἐστίν. Ὁ δὲ Ἱερεμίας πάντα παρέδωκε τὰ μυστήρια,
 29 ἃ εἶδε, τῷ Βαροὺχ καὶ τῷ Ἀβιμέλεχ. Καὶ εἶθ' οὕτως ἔστη
 ἐν μέσῳ τοῦ λαοῦ, ἐκτελέσαι βουλόμενος τὴν οἰκονομίαν αὐτοῦ.
 30 Ἐβόησε δὲ ὁ λίθος, λέγων· Ὡ μοροὶ υἱοὶ Ἰσραὴλ, διὰ τί
 λιθοβολεῖτέ με, νομίζοντες ὅτι ἐγὼ Ἱερεμίας; Ἴδου Ἱερεμίας
 31 ἐν μέσῳ ὑμῶν ἵσταται. Ὡς δὲ εἶδον αὐτόν, εὐθέως ἔδραμον
 πρὸς αὐτόν μετὰ πολλῶν λίθων. Καὶ ἐπληρώθη αὐτοῦ οἰκο-
 32 νομία. Καὶ ἐλθόντες Βαροὺχ καὶ Ἀβιμέλεχ, ἔθαψαν αὐτόν,
 καὶ λαβόντες τὸν λίθον ἔθηκαν ἐπὶ τὸ μνήμα αὐτοῦ, ἐπιγρά-
 ψαντες οὕτως· Οὗτός ἐστιν ὁ λίθος ὁ βοηθὸς τοῦ Ἱερεμίου.

v. 20 και; aeth om | v. 21 μη αποκτεινωμεν κτέ; aeth wir wollen an ihm handeln wie wir an Jesaias gehandelt haben; und ein Theil von ihnen sagte, Nein, fürwahr, mit Steinen werden wir ihn werfen. Und Baruch und Abemelek schrieen ihnen zu, Durch diese Todesart tödtet ihn nicht | v. 22 πληρης b; πληρη a | v. 24 end; aeth adds και ηνεγκαν αυτω λιθον | v. 25 εστησεν; b ανεστησεν | μον; aeth ανου | γενεσθαι; ab adds εως ου παντα οσα ιδον διηγησωμαι τω Βαρουχ και τω Αβιμελεχ | v. 26 λιθος; ab add δια προσταγματος θεου | v. 29 ειθ' ουτως; b ειθ' αυτως (sic) | v. 30 εν μεσω; b εις μεσον | v. 32 ο λιθος; aeth om | end of verse ab add και τα λοιπα των λογων Ιερεμιου και πασα η δυναμις ουκ ιδου (a om) ενταυθα εγγεγραπται εν τη επιστολη Βαρουχ.

TWO ESARHADDON TEXTS.

I publish herewith two Esarhaddon texts autographed in facsimile by myself, from the originals in the British Museum.

The first is composed of three fragments numbered K 3082, S 2027, and K 3086. The whole measures at its greatest length $5\frac{1}{4}$ inches and at its greatest width $3\frac{1}{8}$ inches. It has been published in cuneiform type with transliteration and translation by Mr E. A. W. Budge in his *History of Esarhaddon*, London, 1880, pp. 114—123, and one piece, viz. K 3086, is published in lithograph in III. R. 35, 4, and ascribed to Asurbanipal. Dr Winckler in his recent book *Untersuchungen zur Altorientalischen Geschichte*, Leipzig, 1889, gives on pp. 96, 97 another transliteration and translation of nearly the whole text. An examination of my copy of the text will show some variations from the readings given by my predecessors.

Text No. 2 has never before been published. The original is numbered 80. 7. 19, 15, and in its present broken state has part of another column on the left of the perpendicular line shown in my copy. That column has already been published in autograph by Dr Robert F. Harper in *Hebraica*, IV. 25, and the column which I now give completes his work. The column here published measures $2\frac{1}{8}$ by 4 inches.

Both these fragments are of great importance for the history of Esarhaddon and his times, and I hope that this publication will make them more accessible to historical students.

My thanks are due to my generous friends Dr Bezold, who has kindly collated my copy with the original and made valuable suggestions, and Dr Harper, who allowed me to compare my readings with the copies he had made but not published.

I have also copied a number of Esarhaddon texts belonging to one of the collections acquired by Mr Budge for the Trustees of the British Museum, which, with the greatest generosity, were placed by him at my disposal. Several of these inscriptions are written in Babylonian and one in Archaic characters. These I shall publish together with transliteration, translation and commentary, as soon as they can be suitably prepared.

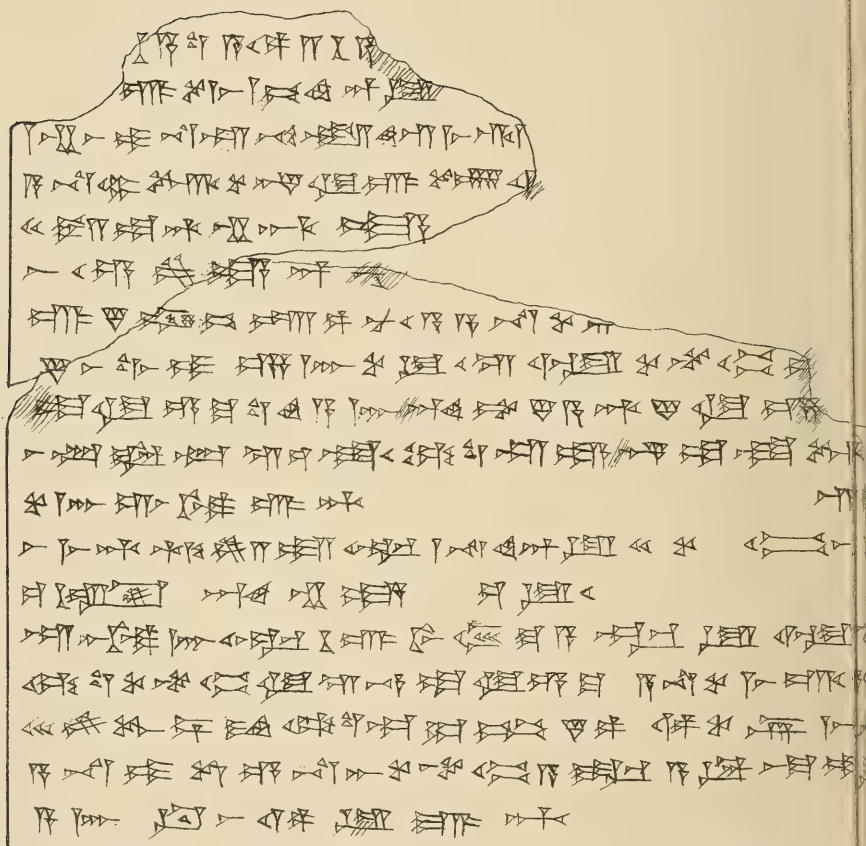
Besides their paleographical interest they throw some new light upon the building operations of Esarhaddon, and will, I believe, contribute to the elucidation of difficult passages in I. R. 49, 50.

ROBERT W. ROGERS.

LONDON, *August 12th*, 1889.

ROGERS, R.W.

OBVERSE.



ESARHADDON TEXTS NO.1.



HAVERFORD COLLEGE STUDIES

Published by the Faculty of

HAVERFORD COLLEGE.

No. 3

Price \$1.

CONTENTS.

	PAGE
The Passion of Perpetua. J. Rendel Harris and Seth K. Gifford .	1
On some properties of the Triangle. Frank Morley	74

To obtain copies of this publication address the Secretary of Haverford College, Haverford College P. O., Pa.

INTRODUCTION.

A new version of the Acts of Perpetua and Felicitas.

IN the following pages the reader is presented with what we believe to be the original Greek text of the celebrated Acts of the Martyrdom of Perpetua and Felicitas, the most beautiful as well as the most undisputed of all the early Christian martyr-records. These Acts have long been current in a Latin dress, but their language was often so obscure that it was not easy to extract a satisfactory meaning from the text, and there were many transliterated Greek words in their pages which must have seemed to scholars as not sufficiently accounted for by the fact that North Africa at the end of the second century was bilingual, or rather trilingual, and that of the languages spoken and written the Greek was perhaps as much the accepted speech as either the Latin or the Punic. Hence the suggestion became thrown out that the published Acts were probably, either wholly or in part, a translation from some lost Greek document. Such a document is now published, as copied by one of the editors from a volume of Lives of the Saints in the library of the Patriarch of Jerusalem. We shall discuss presently the evidence and give the arguments for believing that all existing Latin copies of the Acts are derived from this. At present it is sufficient to say that whether the Greek version be the primary or secondary fountain of the text, it is of such value for the understanding of it and for the clearing of its obscurities, that the welcome which it will meet from Patristic scholars will be sure to outweigh any blame that may attach to our unworthy presentation of it.

Of the Martyrs of Thuburbo.

Few Christians read the story of the martyrdom of Perpetua and her companions, or the almost contemporary story of the martyrs of Lyons and Vienne, without entering into sympathy with the exaltation of spirit which characterises these narratives, and which makes our writer break out into the concluding words "O most brave and blessed martyrs! O truly called and elected to the glory of Christ!" As the faithful, and yet not unartistic editor of the Acts portrays the glorious history of their struggle, the martyrs' faith, even after the lapse of nearly seventeen centuries, is still potent to reproduce in those that have ears to hear (and what Christian has not ears to hear such a story!) a longing after the constancy and the courage of earlier days. As we watch them ascend their brazen ladder, bristling on either side with sword points, into Paradise, they seem to turn, as Perpetua in her vision saw Saturus turn who had preceded her in the ascent, and say as he said, "We wait for thee." Their farewell is an endless welcome to later Christians. Something of the spikenard and balm and frankincense whose sweetness they breathe drops into our atmosphere, to make their memories always to be to the Church an acceptable savour of God in Jesus Christ. It is proper and right, therefore, to make the study of these recovered Greek Acts serve for our own emending as well as for that of the Latin text. And if as we read the record of Perpetua's more than manly wrestlings, we find ourselves rather to be in the place of the spectators than in the arena with the saints; in the historical succession of observation and criticism only, and not in the sequence of suffering with them for Christ in our day and generation, those brave eyes and that cloudless brow may well render us abashed with something of the shame wherewith she struck the spectators in the amphitheatre at Carthage. Thus she being dead may speak to us yet in exhortation or unto edification and comfort.

But the careful Christian student will not omit to note that both of these martyrdoms, the Thuburbitan martyrs and the other group to which we referred above (those of the Church in Gaul), are Montanist martyrdoms, and so are especially concerned with the personality and the operations of the Paraclete. So that when

we say 'O most blessed martyrs,' we must go on and say 'O most blessed Paraclete'; for these martyrs are martyrs of the Holy Ghost, martyrs, that is, of the Living God considered not merely in opposition to the dead gods of the heathen, but as He lives and works in the saints. Now the works of the Holy Ghost are great, and are sought out of them that take pleasure therein.

Accordingly the redactor of the Acts instructs us to regard the grace of the Spirit as operating in two ways; first in the imparting of visions, the effect of which gift is that the Church receives a continual accretion to the deposit of revealed truth; and secondly in the raising up of martyrs, that is, in a continual increment of the testimony to the deposited verities of the kingdom of Christ: the advantage, then, which is to be derived from the story of the martyrs of Thuburbo is that they furnish very beautiful illustrations of both of these methods of the Divine operation. Nowhere are there recorded such instructive and striking visions; never were gathered into the great world-battle so fair a company of athletes whose triumph should belong to the clearest and most convincing chapter of the Christian evidences.

But there is another thing to be noted in connexion with these martyrdoms. We may say of martyrdom, in general, that it is something more than one of God's chosen ways of attesting the revelation which He has given; it is also in many cases an attestation that this truth has taken form in a society, which is interpenetrating and leavening all other society and slowly quickening it into higher forms; a society never more than half-visible, especially when, as in the present case, the living functions belong to the ecclesia within the ecclesia rather than to the ecclesia itself: a society whose constitution runs counter to the stratification of the outer world; where the mighty drop at their first faith from the thrones, and the miserable rise spontaneously into seats of power; until, re-organized in the kingdom of God, bond and free, rich and poor, male and female stand together in the beautiful spiritual brotherhood, of which Christ had spoken when He was upon earth.

The arena at Carthage presents this form of evidence in a most convincing manner, when there are gathered in it a company which have come together, so to speak, from the North and South, from the East and West, of human society; the noble Perpetua, the slaves Revocatus and Felicitas, and their other companions, we

see them suffer in common for a common faith; but especially we may observe them as they are dragged back, after their fight with the beasts, from the gateway of the arena which is called the Vivific Gate, in order that under the dagger of the confector they may be dismissed through the real gate of Life already turning on its golden hinges; and grouping themselves together for one more saintly picture, they press from lip to lip the farewell kiss of Christian peace, in order that, as their historian says, they might perfect their testimony to the faith by the proper rite of the faith. And this kiss of faith and peace and charity, upon which they die, is the true monument and token of the revolution which God was accomplishing in the earth.

Supplementing then the statements of the martyrologist by this single consideration, that their martyrdom is a testimony to the existence of the Church on earth as well as to the truth for which the Church exists, we may pass on very briefly to answer the inevitable question in all martyrology, "What are these, and whence came they?"

"What are these that shine from far?
These that look over the golden bar?
Strong as the lion, pure as the dove."

The Acts inform us that these martyrs come from Thuburbo Minus, a town not far from Carthage: indeed we have every reason to believe that they were removed to Carthage not long after their apprehension by the authorities: for it can hardly be of any other amphitheatre than Carthage that the writer is speaking, as being near the military camp, and apparently well furnished with wild beasts for the shows¹. The period of the martyrdom is the year 203 A.D., when games are being celebrated in honour of the birthday of Geta Caesar. If we may accept the Greek date for the martyrdom (Feb. 2) then the date of their apprehension must be some weeks earlier than this.

The persons apprehended were Saturninus and Secundus; Revocatus and Felicitas, together with Vibia Perpetua. Their number was increased shortly after by the voluntary surrender of Saturus the deacon, who was absent when the law was first set in motion against them; but it was diminished before the games by the death of Secundus in prison, as often happened with early

¹ If not Carthage, we should naturally think of Theveste as the Roman military centre.

Christian martyrs when cast into stinking dungeons, and tortured in the interim between their apprehension and final condemnation.

All of them seem to have been young; Saturus from his office may perhaps be reckoned so: of the rest we are expressly told that they were young catechumens. Revocatus and Felicitas were fellow-slaves, and may have been brother and sister. Perpetua was about 22 years old, of noble birth and excellent education. It does not appear that any of them, except of course Saturus, were baptized at the time when they first came under suspicion; but in the interval during which they remained at large they were baptized. Perpetua's family seem to have been, on the whole, in sympathy with her; and one of her brothers was, like herself, a catechumen: but her father was bitterly opposed to her purpose and by an alternation of threats of violence with pathetic appeals did his best to divert her from her resolution¹.

Both of the women, Perpetua and Felicitas, were married: Perpetua was already a mother; Felicitas became so in the prison: but neither of the husbands appears in the story of the trial: it is not unreasonable, therefore, to suppose that they were concerned in the informations laid against the women; indeed, it is quite likely that, in a Montanising Church like that at Thuburbo, the women had deliberately left their husbands for the Gospel's sake. In any case it would be extremely improbable that both the husbands of two such very young women should have been dead at the time of the martyrdom: and indeed there is almost direct evidence in our Acts that the women had left their husbands; for when they come into the arena an attempt is made to array them as priestesses of Ceres: now we know from Tertullian that it was the custom in Africa for women to leave their husbands in order to dedicate themselves to the service of the goddess. Nor shall we be exercising our imagination unduly if we say that the proposal to dress the martyrs as priestesses of Demeter originated in the idea that it was an appropriate garb for women who had left their husbands for religious reasons. Such conduct was common to the Montanists and to the worshippers of Demeter: one of the charges levelled at Montanus by Apollonius (who wrote against the Cataphrygians at the end of

¹ Augustine by some misunderstanding makes Perpetua's mother as much opposed to her as was her father.

the second century) is that he had taught the dissolution of marriage¹; and on the other hand, as intimated above, we have the direct and contemporary evidence of Tertullian with regard to the worship of the African Demeter: "we know," says he, "that widows attend upon the African Ceres, allured from their marriage by a most hard forgetfulness. For not only do they quit their husbands yet remaining alive, but even introduce other women to them in their own place (they no doubt smiling on it), refusing themselves all contact, even to the kiss of their sons²."

The Acts do not furnish us with a great deal of historical information beyond what bears on the incidents of the prison and the arena. Thus we find out that Dinocrates the other brother of Perpetua had died some years previously of a gangrene in his face; but we only find this out, because one of Perpetua's visions is concerned with his suffering in the next world, and his delivery therefrom by a sister's prayers.

We also learn that the bishop Optatus and presbyter Aspasius (who must be real persons) were not in much esteem with the martyrs nor with one another. There were factions in the Church, though upon what ground of division, whether Montanism or not, it is hard to say. But this information only leaks out from a vision of Saturus when after being caught up into Paradise, they find the bishop and presbyter shut out from the sacred Presence and ominously placed on the left-hand. In the same way we gather incidentally the names of others who had perished either in an earlier stage of the same persecution, or in an earlier persecution.

The fact is the writer was not furnishing materials with a view to history, for even the martyrdom is subservient to the visions; he relates nothing or next to nothing of the judicial proceedings, over which martyrologists are usually diffuse. But he had in hand two precious documents: one containing a vision seen by Saturus, the other containing three visions of Perpetua concluding with the intimation that 'who wills may tell the rest of the story.' Accordingly he told the martyrdom out of respect to Perpetua and as a fitting tribute to the inspiration of her visions. And indeed it is the visions that have impressed the Church, both Montanist and Catholic. The vision of the redemption of

¹ οὗτός ἐστιν ὁ διδάξας λύσεις γάμων Euseb. *H. E.* v. 18.

² *Tert. ad Uxorem* i. 6, *et de exhort. cast.* 13.

Dinocrates after death has probably as much to do with Perpetua's canonization as her death itself. Aubé was inclined to believe that the Acts were not really of this compound character; but that the writer had been guilty of an innocent literary forgery. He imagined he detected the same style in the language of the whole book. Of course this was not surprising if as Aubé suggested the Latin Acts were a translation from the Greek; only in that case he ought not to have projected the translator's uniformity of speech back upon the original scribes. The question can only be decided from the Greek version itself. Our own impression is that the differences of style are quite sufficient to discriminate the various hands in the book; or, if this be too strong, the uniformity of style is not sufficiently pronounced to invalidate the repeated statements of the redactor that he was using Perpetua's own materials.

Now when we turn to the story we find that, besides the historical notes that can be made from point to point, there are a multitude of little details concerning the Church life of the time, which are of the highest value. These Acts are an open window into the Church of the second century. Nevertheless we have not thought it best to discuss them at length nor to recapitulate the story, which we give both in the Greek and in the Latin, to say nothing of a shorter and later form of the Acts of the Martyrdom. We can not tell the actual story better than Perpetua tells it herself; and we have no right to tell it worse. Nor have we occupied space in proving over again what has so often been shewn as to the essentially Montanist character of the Acts. A few foot-notes will probably suffice on this point. The fact is that the changed attitude of modern theologians towards these assumed early heretics renders it unnecessary to revive old controversies. We can hardly deny their history when we have all agreed to build and adorn their sepulchres, as indeed the Western Church did so many centuries since. We therefore proceed to the few critical points that may require to be made, some of which have been already assumed in the preceding statements¹.

¹ For the copies of the Ravenna Mosaics of Perpetua and Felicitas which adorn this book, we are indebted to the kindness of our friend Catharine Backhouse, of Sunderland, who has given us leave to use the plates made from the drawings of her late husband for the illustration of his Church History.

On the Date of the Martyrdom.

A close approximation may be made to the year of the martyrdom by means of the external testimonies to the currency of the Acts and the internal allusions to historical personages. Thus we find not only that the Acts are referred to by Augustine in his commentary on the Psalms and elsewhere, but that they were even known to Tertullian. The latter father, in his treatise *De Anima*, refers to the visions of Perpetua, and in so doing he makes a mistake and gives us quotations from the vision of Saturus. It is fair, then, to infer that in Tertullian's mind the two visions were very closely bound up together, which probably means that he had used the written Acts, in which they are given in juxtaposition. This would make the Acts as well as the martyrdom earlier than the treatise *De Anima*.

But second, in Tertullian's tract against Scapula, mention is made of the very Hilarian who condemned our martyrs; for surely the 'Hilarianus praeses,' under whose administration a popular outcry was made against the Christians, can hardly be any other than the vice-proconsul of the Acts. So that we must place the martyrdom earlier than the treatise *ad Scapulam*. But this treatise bears every mark of having been written when Scapula was in office or very soon after; for Tertullian says "We battle with all your cruelty...we have sent you this letter as fearing not for ourselves but for you¹." It is evident that this language implies that Scapula was still in the place of power.

But from the fact that Scapula was consul in A.D. 195, coupled with the fact that the time between consulate and pro-consulate

¹ The treatise *ad Scapulam* is full of allusions to recent historical persons and events, some of which can be approximately dated. Thus we have Hilarian, Cincius Severus, Vigellius Saturninus &c. Amongst recent tokens of the Divine displeasure towards the city of Carthage, he enumerates a plague of waters, threatening fires which had hung over the walls of Carthage by night, portentous thunders, and an eclipse or blackness equivalent to an eclipse which was especially noted at Utica. This darkness and the thundering are due probably to volcanic causes, for we find from Dion Cassius lxxvi. 2 (shortly after 202 A.D.), that Vesuvius was in flame and that there were mighty roarings (μυκήματα μέγιστα) audible as far as Dion's house at Capua. The fires which hang over Carthage are the Northern Lights, which Dion describes well in lxxvi. 4 (i.e. not long after A.D. 195). πῦρ αἰφνίδιον νυκτὸς ἐν τῷ αἱρί τῷ πρὸς βορρᾶν τοσοῦτον ὥφθη, ὥστε τοὺς μὲν τὴν πόλιν ὄλην, τοὺς δὲ καὶ τὸν οὐρανὸν αὐτὸν καίεσθαι δοκεῖν.

at the end of the second century is about 13 years, we should be inclined to place the pro-consulate of Scapula in Africa about the year 208 A.D. It has, however, been urged that in the treatise in question Severus is spoken of as if already dead: (e.g. c. iv. "Severus himself the father of Antoninus was mindful of the Christians"; "Severus...did not harm them":) so that it may be necessary either to depress slightly the above date for the pro-consulship of Scapula or for the time of production of the treatise; for Severus did not die until A.D. 211 (Feb. 4). In any case Hilarian must be a few years earlier than this.

Turning now to the Acts we find that Hilarian is deputy for a defunct proconsul, whose name is given in Latin as Minucius Timinianus and in Greek as Minucius Oppianus. Neither of these names has the right ring about it. We can find in Latin Minianus, Mucianus and the like, but not I think Timinianus. And the Greek form must either stand for Appianus or be a corruption from some more remote name. It is conceivable that Oppianus may stand for Apronianus who was consul in 191, and Timinianus for Septimianus who was consul in 190; or perhaps Septimianus might be the origin of both the names in question¹. Unfortunately we cannot find that either of these was a Minucius. Septimianus is found written with various additional names in the inscriptions; sometimes M. Petronius Septimianus, and sometimes M. Sura Septimianus, so that his complete name should be M. Petronius Sura Septimianus. If either of these were the correct consul of the Acts we should have to look for the martyrdom about A.D. 203.

An examination of the seventy-sixth book of Dion Cassius which begins with the year 202 A.D. will shew that shortly after this time (see c. 8) Apronianus while in the government of the province of Asia was condemned while absent on a charge of treason. It would seem then that this consideration would rule out Apronianus from any place in our lists. As far as we can make out from the somewhat difficult style of narration of Dion Cassius, who is, however, here at his best as an eye-witness of almost all events which he records, this fixes the interval between the consulship and pro-consulship of Apronianus at twelve or thirteen years. And this will serve as a guide in determining the

¹ Thus $\begin{matrix} \text{TIM} \\ \text{CETIANOC} \end{matrix} \}$ will easily give both OTTIANOC and TIMIANOC.

place of the African proconsuls in the Fasti. It points at all events to Septimianus or some suffect consul of the same period with him.

Now this date would agree very well with the plural form which we find in Hilarian's request to the prisoners to sacrifice for the welfare of the emperors, since at that time both Severus and Caracalla were Augusti; and it would agree also with the statement that the games were being celebrated in honour of Caesar's birthday, the Caesar in question being either Geta the brother of Caracalla, (murdered by the latter in A.D. 212), or else the term is used loosely of some festival connected with the birth or accession to power of the Augusti. The Latin text gives Geta Caesar definitely and it might almost be thought that this was sufficient evidence upon which to correct the Greek text and to base the chronology. If the birthday in question be the natural birthday it cannot be that of Severus, for he was born on the 11th of April, which will not agree with either the Latin or the Greek day for the commemoration of the martyrs (Feb. 2, Feb. 5, March 5). Neither can it be the birthday of Caracalla which was either the 4th or the 6th of April. The birthday then of Geta may perhaps be taken as the festival. A question however arises whether this be his natural birthday or the commemoration of his being made Caesar. Now the latter title was given him under the influence of the army at the time when Caracalla was made Augustus, which seems to have been in A.D. 198, and it is therefore urged that the festival in question may be the fifth anniversary of the Caesarship of Geta¹. His natural birthday would seem to be excluded by the date (vi. Kal. Iun.) assigned to it by Spartian. In any case the story reads very well by the light of events of the year 202 or 203 A.D.

One other consideration may be given, which perhaps will be thought an artificial one; as we read our Acts, we shall be struck with the prominence given to the "kiss of peace" as a Christian sign and as a part of the Christian worship. It appears in the vision of Saturus where the prayer made before the throne is

¹ But Geta appears in official documents as Augustus at least as early as 204 A.D. This may be seen from a Fayûm papyrus (No. 1429, cf. *Mittheilungen aus der Sammlung der Papyrus Erzherzog Rainer*, Bd. ii. p. 13) which is dated as follows: *Λιβ̄ αυτοκρατορων̄ καισαρων̄ λουκιοῡ σεπτιμ̄ σεουηροῡ ευσεβους̄ περτω̄ αραβικοῡ αδιαβηρικοῡ παρθικοῡ μεγιστοῡ καῑ μᾱ αυρηλιοῡ αντωνινοῡ ευσεβους̄ καῑ πουβλιοῡ σεπτιμοῡ γετᾱ καισαρος̄ σεβαστων̄ μεχειρῑ η̄.*

concluded by the 'making of peace,' i.e. by the kiss of charity: it appears also in the pathetic closing scene where the martyrs expire in the arena: and the narrator adds the significant words that it was done in order that they might perfect the mystery of the faith by the rites proper to the faith. At first sight it seems a little artificial to imagine any polemical tendency in such an event at such a time; but that there should be something of a polemical character at all events in the interpretation given by the writer would not surprise any one who had noted the degree in which the Montanist ideas permeate the whole story: after "bread and cheese" in Paradise, and the bishops on the left-hand, we may be prepared for anything. Now it is a fact that precisely at the period in Church History to which our Acts refer, there was a dispute as to whether the "kiss of peace" was at all times proper, and whether there were not occasions when it was of the nature of true religion to omit it. And Tertullian (*De Oratione* c. xviii) in treating of this very question affirms that if the "Peace" is omitted the prayer is not perfected. The striking coincidence of this sentiment with the language of our Acts, "perfecting the mystery of the faith by the proper rite of the faith," should be noted, as it gives us light upon our text and upon its interpretation. It is pretty certain that we must read *μυστήριον* with the Greek against the *martyrium* of the Latin, although the Latin translator has understood what was meant by *οἰκείων τῆς πίστεως*, and has given us the appropriate interpretation "sollemnia pacis," where *pax* stands again for the kiss.

Looking into the matter a little more closely we find that the difficulty arose in the following manner. The Church kept two station-days or sentry-days in the week, the Wednesday and Friday fasts. Now these fasts are of very early origin and probably arose out of antagonism to the Jewish bi-weekly fasts¹; but as time went on, an explanation of their origin was given (which may indeed be the true one), viz. that these were the days when the Bridegroom was taken away, the Betrayal day and the Crucifixion day, and therefore they were the proper days for fasting. The question then came up, whether on these sentry-days the kiss of peace should be given, and it is certain that the Christian Church was divided on the point. Wednesday was an especially difficult day because on that day, the day of betrayal, Judas comes

¹ Cf. *Teaching of Twelve Apostles*, c. viii.

into prominence who betrayed the Lord with a kiss. But the difficulty seems to have been felt both with regard to the two weekly fasts and the annual fasts. One school urged that to give the "peace" was to break up the "station": another that to deny the "peace" was to leave the service imperfect. And it has been maintained that the Montanists, who wished for longer fasts and more of them, used this method of protesting against the Catholic laxity; it is said that they would prolong the fast by denying the peace. Those who have reflected on the fundamental conservatism of the Montanist movement will however be more disposed to believe that it was a Catholic innovation to deny the kiss of peace¹. How widely this dispute spread may perhaps be judged by the traces of it in our own folk-lore, for it is clearly the basis of Launce's humorous description of his lady-love; "she is *not to be kissed fasting*—on account of her breath²."

Now it is well within the bounds of possibility that the writer of our Acts is alluding to this dispute and vindicating the giving of "peace" by the martyrs: and if this were the case then there would be some reason why they should have been incapable of the "peace" in the eyes of the severer critics: in other words it must have been either Wednesday or Friday. Friday may be excluded, first, because there is not much chance that such a coincidence between our Lord's suffering and his martyrs would have passed unnoticed; secondly, because there is, as stated above, a greater objection to the kiss of peace on Wednesday than on Friday. Now it is a matter of interest that Feb. 2, the Greek day of the martyrdom, was a Wednesday in the year 203 A.D.

One other point may be noted in connexion with the dating of the consuls and of the martyrdom. It has been felt that there was something unusual in the replacement of a proconsul by a local procurator: may we not go further and say that there is something strange in the proconsul dying in office, where the office is of such short tenure? And is there not a euphemism latent in the remark that the proconsul was recently deceased? When we reflect upon the number of persons of consular rank who were made away with by

¹ We may even go so far as to suspect that this 'Judas-kiss' is the ground of the tale told by the anonymous writer in Eusebius (*H. E.* v. 16) to the effect that Montanus died after the traitor's own manner (καὶ οὕτω δὲ τελευτῆσαι καὶ τὸν βίον καταστρέψαι Ἰούδα προδότου δίκην).

² Shakespeare, *Two Gentlemen of Verona*, Act III. Sc. ii.

Severus and Caracalla, it ought to surprise no one if a gap should occur in the list of candidates for the proconsulship, or a vacancy amongst those already elected. One has only to look at the lists, in Spartianus or Dion Cassius, of proscribed and assassinated nobles to feel the force of this. We have already intimated that Apronianus got into trouble with the emperor Severus. Spartian also records the death of Petronius, but places his murder subsequent to the death of Geta (A.D. 211). Whether this be Petronius Septiminianus or not, is hard to say; the narrative of Spartian is very confused and often returns on itself, sometimes slaying the slain over again under different emperors. We will content ourselves with saying that the dead proconsul of the Acts will probably be found amongst the political victims of Severus.

The relation of the Greek to the Latin Versions.

With regard to the shorter account, we shall elsewhere attempt to shew that it is independent of the other Latin version and probably based upon the Greek original. Additional force is given to this argument by the peculiarities of style noticeable in each. For example in the shorter version the connective *vero* occurs twenty times while *autem* is found but once. Ruinart's text has only three instances of *vero* while the use of *autem* is very frequent.

This seems also strong *prima facie* evidence in support of our second claim that Ruinart's text is a translation and that the Greek before us is the form in which the narrative was first written.

We shall not of course expect to find the Greek of the third century written by a Carthaginian who undoubtedly spoke some other language as his mother tongue entirely free from foreign idiom. We are prepared for certain peculiarities of style. Indeed it is not impossible that the author was more familiar with Latin than with Greek.

The passages which seem to point to a Greek original are scattered quite generally throughout the piece so as to leave no room for a bilingual theory.

The selections made for comparison are by no means equally convincing. The argument is from the nature of the case cumula-

tive, so that a weak link does not necessarily invalidate the chain. On the other hand many points have been intentionally omitted which will appeal with different force to different individuals: the argument drawn from the choice and order of words, the arrangement of clauses, and the general sense of genuineness which pervades the Greek, will perhaps be the most potent factor in convincing the candid reader.

The examples which follow are taken in the order in which they occur, the Latin from Ruinart, side by side with the Greek.

III. Cum adhuc, inquit, cum persecutoribus essemus. ἔτι, φησίν, ἡμῶν παρατηρουμένων.

The Greek evidently means "while we were still under suspicion," i.e. while they were still at large and their enemies were watching for an occasion to accuse them. For this use of παρατηρέω cf. Epis. Mart. Lugdun. 15, παντὶ δὲ τρόπῳ παρετήρουν ὡς μέγα τι κερδανούντες, εἰ μὴ τύχοιεν ταφῆς.

The Latin "while we were still with our persecutors" is at least a very curious way of saying what is expressed clearly and naturally by the Greek and what the context demands. And indeed the same remark applies to the next clause "Et me pater avertere et deicere pro sua affectione perseveraret," as compared with the simplicity and perspicuity of the Greek: ἐπεχειρεῖ ὁ πατήρ μου λόγοις πείθειν με κατὰ τὴν ἑαυτοῦ εὐσπλαγχνίαν τῆς προκειμένης ὁμολογίας ἐκπεσεῖν.

Further on in the Chapter we may note the confusion of the Latin in the description of the prison, and especially where the prisoners are transferred to a ἡμερώτερον τόπον (Lat. meliorem locum) of the prison:

Tunc exeuntes de carcere universi sibi vacabant,

Καὶ δὴ ἕκαστοι προσαχθέντες ἐσχόλαζον ἑαυτοῖς,

as it is quite evident that they did not go out from the prison at this time.

At the beginning of Chap. iv. we have the following:

Tunc dixit mihi frater meus: Domina soror, iam in magna dignitate es, (et) tanta ut postules visionem...

Τότε εἶπέν μοι ὁ ἀδελφός, Κυρία ἀδελφή, ἤδη ἐν μεγάλῳ ἀξιώματι ὑπάρχεις τοσαύτη οὔσα, ὥς εἰ αἰτήσεις...

τοσαύτη οὔσα, translated into the Latin by tanta, has caused the confusion in the Latin MSS. One would naturally suppose

that the writer would have avoided the ambiguity involved in *tanta* had he been writing Latin first hand.

In the next sentence *fidenter repromisi* is hardly the same thing as *πίστεως πλήρης οὔσα ἐπηγγειλάμην*, while the context clearly shews that fulness of faith rather than faithfulness was demanded.

Further on in the Chapter where the dragon presents his head quietly at the foot of the ladder, the action of fear is far more appropriately described than by the Latin, *Et desub scala... lente elevavit caput*.

In the next sentence the translator seems to have taken *ὥς εἰς* for *ὥς εἰ* rendering it *quasi* (Holstenius, *Et quasi primum gradum calcassem, καὶ ὥς εἰς τὸν πρῶτον βαθμὸν ἐθέλησα ἐπιβῆναι*).

In the passage beginning Chap. v.

Post paucos dies rumor cucurrit ut audiremur. Supervenit autem et de civitate pater meus, consumptus taedio, ascendit ad me, etc.

Μετὰ δὲ ἡμέρας ὀλίγας ἔγνωμεν μέλλειν ἡμᾶς ἀκουσθῆσθαι· παρεγένετο δὲ καὶ ὁ πατήρ ἐκ τῆς πολλῆς ἀποδημίας μαραινόμενος. καὶ ἀνέβη πρὸς με κτέ.

not to mention *ut audiremur*, the use of *supervenit* is striking as well as the position of *et* and the expression *de civitate*. The translator seems to have read *ἐκ τῆς πόλεως* for *ἐκ τῆς πολλῆς* and to have ignored the force of *καὶ*. Even if we could account for the first discrepancy on the supposition of the Latin original, the awkwardness of *et* with *de civitate* and the appropriateness of *καί* with *ὁ πατήρ* are certainly points in favor of the Greek. Again the mention of the father's return,—after speaking of his absence, Chap. III., *ἀποδημήσαντος αὐτοῦ*,—is much more in place than the meaningless phrase *de civitate*. Even if we assume that the prisoners had already been taken to Carthage it seems hardly likely that *de civitate* could refer to the father's coming from Thuburbo.

Chap. VI. begins as follows,—

Alio die cum pranderemus, subito rapti sumus ut audiremur.

Καὶ τῇ ἡμέρᾳ ἐν ᾗ ὥριστο ἠρπάγημεν ἵνα ἀκουσθῶμεν.

Is it possible that the translator has seen some form of *ἀριστάω* in *ὥριστο*? He has made quite as fatal mistakes elsewhere. But aside from this it is not probable that breakfast with the prisoners was so formal and protracted an affair that Perpetua, who in general makes little account of such trifles, would have thought

the interruption of their meal worthy of special mention. It seems far easier to accept the other alternative and read "on the day appointed."

In the vision in which Perpetua sees her brother after his release and describes the fountain from which he drank, we have Chap. VIII.

Et piscinam illam quam retro vide-
ram, summisso margine usque ad um-
bilicum pueri; et aquam de ea trahebat
sine cessatione, et super margine phiala
erat aurea plena aqua: et accessit Dino-
crates, et de ea bibere coepit, quae phiala
non deficiebat. Et satiatus abcessit de
aqua ludere more infantium gaudens,
etc.

Καὶ ἡ κρητὶς τῆς κολυμβήθρας κατῆχθη
ἕως τοῦ ὀμφαλίου αὐτοῦ, ἔρρεεν δὲ ἐξ αὐτῆς
ἀδιαλείπτως ὕδωρ, καὶ ἐπάνω τῆς κρηπίδος
ἦν χρυσῇ φιάλῃ μεστή· καὶ προσελθὼν ὁ
Δεινοκράτης ἤρξατο ἐξ αὐτῆς πινεῖν· ἡ δὲ
φιάλῃ οὐκ ἐνέλειπεν· καὶ ἐμπλησθεὶς ἤρξατο
παίζειν ἀγαλλιῶμενος ὡς τὰ νήπια κτέ.

In the Latin, the use of *traho* for *haurio* is peculiar as well as the statement 'that he drank incessantly' standing, as it does, first; while the description proceeds 'Dinocrates approached and *began* to drink'; not incessantly, but until his thirst was quenched. Nor does the narrative allow us to take *trahebat* in a *general* sense of what D. was accustomed to do; for the vision only describes what Perpetua actually saw.

Finally we may notice the barbarism in *abcessit ludere*.

Turning now to the Greek we find that water was *flowing* from the fountain incessantly (the translator having read ἤρυνεν for ἔρρεεν and taken ὕδωρ for the object), and that the boy, having drunk his fill, *began* to play (where ἤρξατο is taken for ἤρχετο).

For a similar description where the water is likewise flowing from the fountain, cf. Ruinart *Passio SS. Jacobi, Mariani et aliorum plur. Mart. in Numidia* c. VI., Sinus autem in medio pellucidi fontis exuberantibus venis, et plurimis liquoribus redundabat ...Tunc ibi Cyprianus phialam, quae super marginem fontis jacebat, arripuit; et cum illam de fontis rivulis implesset, hausit.

In Chap. x. near the beginning, *distinctam* can be traced pretty clearly to περιεξωσμένος, and in the next sentence, ποικίλα must mean 'of bright and varied colors' for which *multiplex* is a poor equivalent.

Further on in the Chapter in the description of the great βραβεύτης we see how διεξωσμένος has again given rise to confusion in the Latin, from the fact that the translator has not governed the ἐσθῆτα by it nor placed πορφύραν in the relative clause.

In Chap. XI. we have the following :

Et liberati primam iam vidimus lucem immensam.

Καὶ δὴ ἐξελθόντες τὸν πρῶτον κόσμον
φῶς λαμπρότατον εἶδομεν.

Cod. C gives a form much nearer the original than Ruinart's text, viz.: Et liberati primum iam mundo vidimus lucem immensam. It is evidently the ἐξελθόντες which has given the trouble and has been confused with some form of ἐλευθερώ.

In the next sentence *percepimus* is by no means an equivalent for *μετεिलήφμεν*, while the idea to be conveyed is undoubtedly that of *taking part* in the promise.

A few lines further on *via lata* seems in some mysterious way to represent *ἀναλαβόντες τὴν ὁδόν*.

Finally near the end of the Chapter the good Greek ἐξητούμεν δὲ καὶ περὶ τῶν λοιπῶν ποῦ ἄρα εἰσὶν, has been mutilated into the Latin, Et quaerebamus ab (Holstenius et cod C, de) illis ubi essent ceteri.

In Chap. XII. how is the charming picture καὶ τῇ χειρὶ περιέλαβεν τὰς ὄψεις ἡμῶν marred in its Latin transformation, Et de manu sua traiecit nobis in facie (H, faciem); and on the other hand how supernaïve is 'go and play' for πορεύεσθε καὶ χαίρεσθε in the next sentence.

Near the middle of Chap. XIII. ἀναχωρέω has been given the meaning of ἀναχωρίζω, clearly counter to the sense of the passage.

In Chap. XVIII. we find διὰ τοῦτο τὴν ψυχὴν ἡμῶν παρέδώκαμεν rendered by *adeo animas nostras addiximus*: and in Chap. XX., near the end, ὃς παριστήκει αὐτῇ by *qui ei adhaerebat*. The precision and correctness of the Greek seem evident in both cases.

For our last example let us compare a part of the account of the execution in Chap. XXI. :

Et cum populus illos in medium postuleret, ut, gladio penetrante in eorum corpore, oculos suos comites homicidii adiungeret; ultro surrexerunt, et se quo volebat populus transtulerunt.

(Εἰς σφαγὴν δὲ) ὁ ὄχλος ᾗτησεν αὐτοὺς εἰς μέσον μεταχθῆναι ὅπως διὰ τῶν ἀγίων σωμάτων ἐλαυνόμενον τὸ ξίφος θεάσονται, καὶ μακάριοι μάρτυρες τοῦ χρίστου ἐκόντες ἡγέρθησαν, ἡσυχύνοντο γὰρ ὀλίγους μάρτυρας ἔχειν ἐπὶ τῷ μακαρίῳ θανάτῳ αὐτῶν· καὶ δὴ ἐλθόντων αὐτῶν ὅπου ὁ ὄχλος ἐβούλετο κτε.

It hardly admits of doubt that the clause beginning ἡσχύνοντο, 'for they were ashamed to have only a few witnesses at their blessed death,' represents the original thought of the writer, for which apparently the Latin has the corrupt form 'oculos suos comites homicidii adiungeret.' At any rate the Latin is so badly muddled in this instance as well as in many others of which we have noted a few, that, on the assumption that it once had the correct form, it is difficult to understand how it could have lent so much perspicuity to the Greek and lost so much of that quality itself. For certainly several difficult and perplexing readings are entirely cleared up by reference to the Greek, while the Latin with its three MSS. very seldom throws any light on the Greek.

In the Latin text the following words are found apparently direct transcriptions from the Greek, with regard to which there seems no reason why they should have been chosen in place of genuine Latin words,—viz. machaera, tegnon, oramate, diastema, Hagios. In the Greek on the other hand we have πραιτώριον, ματρώνα, and the expression ἐν νέρβω (if indeed the text is correct) two of which are technical terms, where Latin words are most to be expected. An argument could hardly be drawn from these in favor of a Latin original.

Besides these *afa* is given for κονιορτός; the epithet *Optio* is applied to Pudens, the keeper of the prison, where Ruinart observes "Inspectorem putant Bollandiani a graeco verbo ὄπτομαι" (the word is wanting in the Greek); for the common use of this military term we refer to our note *in loc.*; and, lastly, *Cataractarium* stands for τῶν παρατηρούντων.

As before stated the preceding argument makes no claim to exhaustiveness; on the other hand we believe that anyone who carefully compares the two texts will find much additional evidence in favor of the priority of the Greek.

On the shorter Acts of Perpetua and Felicitas.

We must now examine the relation which subsists between the shorter form of the Acts as published by Aubé from seven Latin MSS. in the National Library at Paris¹, and the longer Latin and Greek Acts respectively.

These Acts are valuable both for the history of the martyrdom and for the text of the longer form of the Acts. On any hypothesis as to the time of their production, they furnish in some respects new material to the historian; since they give us, for example, a complete account of the proceedings in court, and what constitutes properly the Acta of any given set of martyrdoms, viz. the interrogatories of the judge and the replies or confessions of the prisoners. Now this account may be mere matter of tradition written down to fill the evident lacuna in the current Acts, which are so taken up with the visions of the saints that they have no time left for the summary of the legal proceedings: or again they may be, as Aubé seems to think, the real record of the proceedings, modified only by some later hand, so as to refer them to the time of Valerian and Gallienus in whose consulate they place the martyrdoms². It is merely a question of how much weight, less or more, should be given to the short form of the Acts when recording some details not given either in the longer Latin or Greek Acts.

When, however, the shorter Acts contain matter in common with the longer Acts, a little investigation shews that they do not constitute any fresh historical evidence, but, being derived from the longer form, the common matter is a new factor in the textual evidence where there is a diversity of readings, and in particular it becomes important to enquire whether the compiler of these Acts drew upon the Latin or Greek forms, respectively, of the longer work. Now in order to determine this point, the best way will be to place the parallel passages side by side, so that we may illustrate any passage in the shorter Acts by means of their possible or actual written sources. And this we may do as follows, taking the order from the shorter Acts:

¹ Aubé, *Les Chrétiens dans l'empire Romain*, pp. 521—525.

² Similar phenomena occur in the accounts of the martyrdom of Cyprian.

Short form.

Facta persecutione sub
Valeriano et Gallieno Con-
sulibus,

Comprehensi sunt vene-
rabiles viri iuvenes Satorus
et Saturninus, duo fratres,
Revocatus et Felicitas so-
ror eius et Perpetua quae
erat de nobili genere et
habebat patrem et matrem
et duos fratres et filium
ad mamillam.

Annorum enim erat illa
duorum et viginti, apud
Africam in civitate Tubur-
bitanorum.

Long form (Greek).

i. Ἐπὶ Οὐαλεριανοῦ καὶ
Γαλληνοῦ διωγμὸς ἐγένετο·

ii. Συνελήφθησαν νεανί-
σκοι κατηχούμενοι, Ῥεουκά-
τος καὶ Φηλικηγάτη συν-
δοῦλοι, καὶ Σατορνίνος καὶ
Σεκοῦνδος· μετ' αὐτῶν δὲ καὶ
Οὐιβία Περπετούα, ἥτις ἦν
γεννηθεῖσα εὐγενὴς... αὕτη
εἶχεν πατέρα καὶ μητέρα καὶ
δύο ἀδελφούς... εἶχεν δὲ καὶ
τέκνον ὃ πρὸς τοὺς μασθοὺς
ἔτι ἐθήλαζεν·

Ἦν δὲ αὕτη ἐτῶν εἴκοσι
δύο.

Ἐν πόλει Θουβουρβιτάνων
τῇ μικρότερᾳ.

Long form (Latin).

Apprehensi sunt a-
dolescentes catechumeni,
Revocatus et Felicitas
conserva eius, Saturni-
nus et Secundulus, inter
quos et Vibia Perpetua,
honeste nata... habens
patrem et matrem et fra-
tres duos... et filium in-
fantem ad ubera.

Erat autem ipsa anno-
rum circiter viginti duo-
rum.

Comparing the preceding passages we see (1) that the epitomator has apparently worked on a form of the Acts which already had the prefatory matter, and it is even conceivable from his using the words "apud Africam" that he used Acts which shewed also the Metaphrast's preface, (ἐν Ἀφρικῇ). The last point is, however, less certain.

(2) He seems to be interpreting a Greek text rather than the Latin; *comprehensi* for instance is a more literal rendering of *συνελήφθησαν* than the Latin *apprehensi*. On the other hand *soror ejus* seems more like a correction of *conserva ejus* than a translation of *συνδοῦλοι*. But then again, if he had been using a Latin text, he had no need to alter 'honeste nata,' nor 'ubera'; nor to drop the word 'circiter' in the Latin statement of the age of Perpetua.

(3) The historical data added are that Valerian and Gallienus were the *consuls*, and that, of the martyrs, Satorus and Saturninus were brothers, and Revocatus and Felicitas brother and sister. The last point is worked in again later on. We have no sufficient means of weighing the value of the statement.

Let us proceed with the comparison:

Minutius proconsul dixit:

Καὶ Ἱλαριάνος ἐπίτροπος
τότε τοῦ ἀνθυπάτου ἀποθα-
νόντος Μινουκίου... λέγει.

Et Hilarianus procu-
rator qui tunc loco pro-
consulis Minuci Timini-
ani defuncti... inquit.

¹ Does the writer mean 'venerabiles' for an equivalent of *κατηχούμενοι*?

Here we have an arbitrary correction on the part of the redactor who, perhaps, did not think it correct that a proconsul's powers should be delegated to an inferior officer.

Perpetua vero dixit ad eum: Pater, ecce, verbi gratia, vides vas iacens aut fictile aut cuiuslibet generis?

Et ille respondit: Video, quid ad haec.

Perpetua dixit, Numquid aliud nomen potest habere quam quod est? At ille respondit, Non. Perpetua dixit, Nec ego aliud nomen accipere possum quam quod sum, Christiana.

Tunc pater eius audito verbo irruit super eam, volens oculos eius eruere: et exclamans confusus egressus est foras.

Καὶ γὰρ πρὸς αὐτόν· Πάτερ, ἔφην, ὁρᾷς λόγον χάριν σκευὸς κείμενον ἢ ἄλλο τι τῶν τοιούτων;

κακείνος ἀπεκρίθη· Ὁρῶ·

καὶ γὰρ· Ἄλλο ὀνομάζειν αὐτὸ μὴ θέμις; οὐδὲ δύναμαι εἰ μὴ ὁ εἰμὶ τούτεστιν χριστιανή.

Τότε ὁ πατήρ μου ταραχθεὶς τῷδε τῷ λόγῳ ἐπελθὼν ἠθέλησεν τοὺς ὀφθαλμοὺς μου ἐξορύξαι· ἔπειτα μόνον κράξας, ἐξῆλθεν.

Pater inquit vides verbi gratia vas hoc iacens, urceolum sive aliud?

Et dixit: video.

Et ego dixi ei: numquid alio nomine vocari potest quam quod est? Et ait, Non. Sic et ego aliud me dicere non possum, nisi quod sum, Christiana.

Tunc pater motus in hoc verbo, misit se in me, ut oculos mihi erueret: sed vexavit tantum et profectus est.

Here the short Acts have preserved the *κράξας* of the Greek, (=exclamans), which the Latin has corrupted somehow into *vexavit*. *Confusus* also in the last sentence is for the Greek *ταραχθεὶς* of which the Latin gives *motus* as the equivalent. We may, therefore, again recognize that the Greek is the primary authority.

But this being so, it becomes a question whether there was not some word in the first sentence after *κείμενον*, answering to the two Latin renderings *fictile*, and *urceolum*. And again whether the Greek should have restored to it the sentence corresponding to 'At ille respondit, non': 'et ait non.' In the last case the words 'et ait non' evidently break the sequence of the Latin: for there is in the longer Latin no *et ego dixi* to follow, as there should have been when the speaker had changed. Moreover the terse and striking Greek would be sure to have been expanded by the implied negative on the part of Perpetua's father.

The other question is not quite so clear: the Greek is quite intelligible but perhaps ἡ ὀστράκινον should be added.

Vidi in visu hac nocte scalam erectam mirabili altitudine usque ad caelum,

Εἶδον κλίμακα χαλκῆν θαυμαστοῦ μήκους· ἥς τὸ μήκος ἄχρους οὐρανοῦ· στενὴ

Video scalam aeream mirae magnitudinis pertinentem usque ad caelum,

et ita erat angusta ut nonnisi unus per eam ascendere posset. Dextra vero laevaue inerant fixi cultri et gladii ferrei ut nullus circa se nisi ad caelum respicere posset.

Sub ea vero iacebat latens draco teterrimus ingenti forma, ut prae metu eius quivis ascendere formidet.

Vidi etiam ascendentem per eam Saturum usque ad sursum et respicientem ad nos et dicentem: ne vereamini hunc draconem qui iacet: confortamini in gratia Christi, ascendite et nolite timere ut mecum partem habere possitis.

Vidi etiam iuxta scalam hortum ingentem, copiosissimum et amoenum et in medio horto sedentem senem in habitu pastoralis et mulgentem oves, et in gyro eius stantem multitudinem candidatorum: et aspiciens ad nos vocavit ad se et dedit nobis omnibus de fructu lactis. Et cum gustassemus, turba candidatorum responderunt Amen: et sic praeclamore vocum sum expergefacta.

δὲ ἦν ὡς μηδένα δι' αὐτῆς δύνασθαι εἰ μὴ μοναχὸν ἕνα ἀναβῆναι· ἐξ ἑκατέρων δὲ τῶν τῆς κλίμακος μερῶν πᾶν εἶδος ἦν ἐμπεπηγμένον ἐκεῖ ξιφῶν δοράτων ἀγκίστρων μαχαίρων ὀβελίσκων· ἵνα πᾶς ὁ ἀναβαίνων ἀμελῶς καὶ μὴ ἀναβλέπων τοῖς ἀκροῖσι τὰς σάρκας παραχθείη·

Ἦν δὲ ὑπ' αὐτῇ τῇ κλίμακι δράκων ὑπερμεγέθης ὃς δὴ τοὺς ἀναβαίνοντας ἐνήδρευεν ἐκθαμβῶν ὅπως μὴ τολμῶσιν ἀναβαίνειν.

Ἀνέβη δὲ ὁ Σάτυρος·... ὡς οὖν πρὸς τὸ ἄκρον τῆς κλίμακος παρεγένετο ἐστράφη καὶ εἶπεν·.....

καὶ εἶδον ἐκεῖ κῆπον μέγιστον καὶ ἐν μέσῳ τοῦ κήπου ἄνθρωπον πολὺν καθεζόμενον, ποιμένος σχῆμα ἔχοντα, ὑπερμεγέθης ὃς ἡλμευγεν τὰ πρόβατα· περιεστῆκεισαν δὲ αὐτῷ πολλὰι χυλιάδες λευχειμονούντων· ἐπάρας δὲ τὴν κεφαλὴν ἐθεάσατό με..... καὶ ἐκάλεσέν με καὶ ἐκ τοῦ τυροῦ οὗ ἡλμευγεν ἔδωκέν μοι ὡσεὶ ψωμίον· καὶ ἔλαβον ζεύξασα τὰς χεῖράς μου, καὶ ἔφαγον· καὶ εἶπαν πάντες οἱ παρευώτες· Ἀμήν· Καὶ πρὸς τὸν ἦχον τῆς φωνῆς ἐξυπνίσθη.

et ita angustam, per quam nonnisi singuli ascendere possent: et in lateribus scallae omne genus ferramentorum infixum. Erant ibi gladii, lanceae, hami, machaerae, ut si quis negligeret aut non sursum adtendens ascenderet, laniaretur et carnes eius inhaererent ferramentis.

Et erat sub ipsa scala draco cubans mirae magnitudinis qui ascendentibus insidias parabat et exterrebat ne ascenderent.

Ascendit autem Saturus prior:.....et pervenit in caput scallae et convertit se ad me et dixit mihi.....

et vidi spatium horti immensum et in medio horti sedentem hominem canum in habitu pastoris, grandem, oves mulgentem: et circumstantes candidatos millia multa: et levavit caput et aspexit me:..... et clamavit me et de caseo quod mulgebat dedit mihi quasi buccellam, et ego accepi iunctis manibus et manducavi. Et universi circumstantes dixerunt Amen. Et ad sonum vocis experrecta sum.

A little examination will shew that the differences between the two Latin texts in those parts of the story which they have in common, are not due to free handling of the longer Latin on the part of the redactor of the shorter Acts: they are fundamental differences and not mere emendations. The originality of the

shorter acts is shewn also by the use of peculiar expressions like 'in gyro eius,' 'de fructu lactis.' We should conclude then that both the Latin versions arise in some way out of the Greek. Dismissing, then, the longer Latin Acts, let us see how the compiler uses his Greek materials.

The text of the shorter Acts now proceeds with the judicial interrogatories; in which nothing seems to be taken from the published Acts, unless it be the information as to the condition of Felicitas, until we come to the trial of Perpetua.

Proconsul ad Perpetuam dixit: Quid dicis, Perpetua, sacrificas? Perpetua; Christiana, inquit, sum et nominis mei sequor auctoritatem ut sim Perpetua. Proconsul dixit: Parentes habes. Perpetua respondit, Habeo.

Ἐπίθυσον ὑπὲρ σωτηρίας τῶν αὐτοκρατόρων· κἀγὼ ἀπεκρίθην οὐ θύω.

This question appropriately makes way for the introduction of the scene in the court between Perpetua and her father; the compiler of the Acts now draws largely on the longer version. But in order to fill up obvious deficiencies in the story as received, the husband of Perpetua turns up with the rest of the family. He is, however, little better than a lay figure adding nothing to the dialogue ("the poor craven bridegroom says never a word") and only an imperceptible quantity to the tears and lamentations.

Audientes vero parentes eius, pater, mater, fratres et maritus simulque cum parvulo eius qui erat ad lac venerunt cum essent de nobili genere. Et videns eam pater eius stantem ante proconsulis tribunal cadens in faciem suam dixit ad eam: Filia, iam non filia, sed domina, miserere aetati meae patris tui si tamen mereor dici pater, miserere et matris tuae quae te ad talem florem aetatis perduxit, miserere et fratribus tuis et huic infelicissimo viro tuo, certe vel parvulo huic qui post te vivere non poterit.

Καὶ ἐφάνη μετὰ τοῦ τέκνου μου ὁ πατήρ·
.....
[ὁ πρὸς τοῖς μασθοῖς ἔτι...]¹
[γεννηθεῖσα εὐγενῶς]
.....
ρίπτειν ἐπὶ γῆς καὶ πρηνῆς κατακέκλεται...
.....
Θύγατερ...οὐκέτι με θυγατέρα ἀλλὰ κυρίαν ἐπεκάλει.....
ἐλέησον τὰς πολιὰς μου, ἐλέησον τὸν πατέρα σου, μνήσθητι ὅτι ταῖς χερσίν ταύταις πρὸς τὸ τοιοῦτον ἄνθος τῆς ἡλικίας ἀνήγαγόν σε·
.....
ὅρα τοὺς ἀδελφοὺς σου.....
ἶδε τὸν νιόν σου ὃς μετὰ σε ζῆν οὐ δύναται.
ἀπόθου τοὺς θυμοὺς.....
οὐδεὶς γὰρ ἡμῶν μετὰ παρρησίας λαλήσει ἐὰν τί σοι συμβῇ.

Depone hanc cogitationem tuam. Nemo enim nostrum post te vivere poterit, quin hoc generi meo nunquam contigit.

¹ Evidently the epitomator repeated these words from the earlier chapters.

A comparison between the two texts will shew that the compiler has recklessly displaced the sequence of the Greek Acts; the address of the father to Perpetua takes places in the open court; in fact two or three visits and addresses are tessellated together. At the end the word *συμβῆ* suggests the fact that no such shame has ever happened to our family.

Praecepit ut in Caesaris natale bestiis mitterentur.

Et cum essent in carcere iterum vidit visionem Perpetua Aegyptium quendam horridum et nigrum iacentem et volutantem se sub pedibus eorum.....
prostrato inimico generis humani.

Contristantibus vero iis de Felicitate quod esset praegnans in mensibus octo, statuerunt unanimiter pro ea precem ad Dominum fundere. Et dum orarent subito enixa est vivum. Quidam vero de custodibus dixit ad eam: Quid factura es cum veneris ad amphitheatrum quae talibus detineris tormentis?

Felicitas respondit: Hic ego crucior, ibi vero pro me Dominus patietur.

Euntibus vero eis sequebatur Felicitas quae ex sanguine carnis ad salutem sanguinis ducebatur et de obstetrice ad gladium et de lavatione post partum balnei sanguinis effusione meruit delavari.

Passi sunt sub Valeriano et Gallieno imperatoribus apud Africam in civitate Tuburbitanorum sub Minutio proconsule die nonarum Martiarum.

Actus eorum in ecclesia ad aedificationem legite, etc.

Reviewing the manner in which the compiler of the shorter Acts has used (or misused) his materials, we can hardly feel confidence in any apparently fresh historical details which he gives. Nor can we suppose that the judicial interrogatories are anything else than a successful attempt to fill up an obvious lacuna in the

Τότε ἡμᾶς πάντας πρὸς θηρία κατακρίνει· γενέθλιον γὰρ ἡμελλεν ἐπιτελεῖσθαι Καίσαρος.

Καὶ ἦλθεν πρὸς με Αἰγύπτιος τις ἄμορφος τῷ σχήματι μετὰ τῶν ὑπουργούντων αὐτῷ καὶ ἄντικρυς βλέπω Αἰγύπτιον ἐκεῖνον ἐν τῷ κονιρτῷ κυλιόμενον..... πρὸς τὸν διάβολόν ἐστιν ἡ ἐσομένη μάχη. ἐκεῖνη γὰρ...οκτὼ μηνῶν ἔχουσα γαστέρα...

Ἄλλὰ καὶ οἱ συμμάρτυρες αὐτῆς περιλῦποι ἦσαν σφόδρα οὕτω καλῶς συνεργόν... καταλείπειν...κοινῷ στεναγμῷ ἐνώθεντες προσευχὴν πρὸς τὸν Κύριον ἐποιήσαντο· καὶ εὐθὺς μετὰ τὴν προσευχὴν ὠδῖνες αὐτὴν συνέσχον· [ἔτεκεν δὲ κοράσιον] ἔφη δὲ τις τῶν παρατηρούντων ὑπηρετῶν· εἰ νῦν οὕτως ἀλλεῖς τί ἔχεις ποιῆσαι, βληθεῖσα πρὸς θηρία;.....

Κάκεινη ἀπεκρίθη· Νῦν ἐγὼ πάσχω ὁ πάσχω· ἐκεῖ δὲ ἄλλος ἐστὶν ὁ πάσχω.

Ἠκολούθη δὲ ἡ Περπετούα.....

Ὁμοίως δὲ καὶ ἡ Φηλικητάτη,...ἀπὸ αἵματος εἰς αἷμα, ἀπὸ μαίας πρὸς μονομαχίαν, μέλλουσα λούσασθαι μετὰ τὸν τοκετόν, βαπτισμῷ δὴ ὑστέρῃ.

Ut supra.

(The Latin date instead of the Greek.)

...οὐκ ἦσσαν τῶν παλαιῶν γραφῶν ἀ εἰς οἰκοδομὴν ἐκκλησίας ἀναγινώσκεται κτέ.

history of the proceedings. We cannot agree with Aubé that they bear a decided stamp of genuineness: it is possible to fabricate a judicial investigation without making a ridiculous caricature of the judge. The fact that he is humane does not make the dialogue historical.

To sum up: the shorter Latin Acts were made, solely from the Greek, after the time of Valerian and Gallienus: and since they were made from a Greek MS. which already had erased the name of Geta, and prefixed the notice as to Valerian and Gallienus, we may conclude that they must have been written some time later than the middle of the third century. If the closing sentences belong to this version in its first form, as seems almost certain, then these Acts are posterior to the time when Perpetua and Felicitas were received into the Calendar (? Carthaginian or Roman), with the date of their celebration corrected from February to March. So that again we must ascribe them to a later date.

The compiler of the Acts has drawn nothing from the longer Latin version; and therefore, as far as he was concerned, these Latin Acts may be held not to have existed; a consideration which militates very strongly against the current belief in the antiquity of the published Latin text of Ruinart and Holstein.

On the influence of the Acts of Perpetua on the later Martyrologies.

It is a curious study to trace the manner in which one famous martyrdom acts upon the record of those that come afterwards, so that the genuine martyrologies copy the language of earlier recitals of a similar nature, and the apocryphal martyrologies intrude habitually not only the language but even historical details from genuine records, often without a pretence at disguise in the borrowed matter. And this tendency makes it often difficult to discriminate between true and false in a series of connected martyrdoms. For instance the martyrdom of S. Victor and his companions relates the crushing of the saint between mill-stones and makes him say in the midst of his tortures that he is "the wheat of God"; it is clear that the writer has borrowed this from the epistle of Ignatius to the Romans, where 'frumentum Dei' is merely a strong figure of speech; he has given us an incident in which the figure is very literally translated. Obviously

S. Victor never said anything of the kind; and it is probably almost as certain that he never suffered anything of the kind; but whether we can go further and detect the residual grains of truth out of the heap of fiction is more difficult. Ruinart prints the whole story, of course, without suspicion amongst his *Acta Sincera*; but then Ruinart used his winnowing fan very gently: and the critical breeze was only beginning to blow.

Lightfoot holds that the Acts of Perpetua are a case of the same kind inasmuch as they are coloured by the language of the Ignatian epistles, a proposition which we shall examine presently; but in this case, since it is only language that is borrowed and not history, no reflection is made upon the authenticity of the Acts. The same thing is true of a host of martyrdoms which furnish parallelisms with the great prae-Christian models of suffering endurance, such as the case of the Three Children in the Furnace, or the group of Maccabee Children. It is natural, for instance, for martyrs in the flames to see Christ with them, or to be seen with him; almost as natural for them to be refreshed with a whistling wind or a miraculous dew. But when the details of the hagiology present more decided coincidences than these simple subjective ones, we may easily find ourselves in the region of fable pure and simple. Such is the case for instance of the martyrdom of Felicitas and her seven sons which is nothing more than a Christian reprint of the heroism of the Maccabees.

It is natural, then, to expect that such a famous early martyrdom as that of Perpetua should have left its mark upon later stories: we will give one instance, with the view of shewing how closely one writer can attach himself to another without being suspected of plagiarism or worse.

The *Sincere Acts* of Ruinart contain the account of the Passion of Montanus, Lucius and other African martyrs. Ruinart refers these martyrdoms to the year 259 A.D. or 260.

The writer of these Acts is persuaded that modern examples of the faith may, under the influence of divine promise, touch the mark of earlier times: (c. IV. nec difficile credentibus fuit, nova posse ad vetera exempla pertingere, Domino per spiritum pollicente): a theme to which he returns at the close of the story, intimating that we may learn from the new scriptures as we have learnt from the old; (c. XXIII. "O martyrum gloriosa documenta! O testium Dei experimenta praeclara, quae ad memoriam posterorum

scripta sunt merito, ut quemadmodum de scripturis veteribus exempla, dum discimus, sumimus; etiam de novis aliqua discamus"). Obviously the writer has been imitating the Acts of Perpetua. So far the imitation has nothing to do with his veracity; it is literary, not historical. But what are we to say when we find that they are brought before a Procurator who happens to be filling the place of a Proconsul who has died in office? c. VI. "subito rapti sumus ad Procuratorem qui defuncti proconsulis partes administrabat." In the Acts of Perpetua this has been one of the difficult points to explain, on account of the deficiency of precedent for such a delegation of proconsular power¹. But even if precedent existed, the probability of this event happening in Africa twice in fifty years may be taken as infinitely small. Moreover the language "subito rapti sumus" is taken from the Perpetua Acts. When they come to the prison, instead of making the martyrs feel as Perpetua did "how dreadful and how dark was this place!" and then go on in faith until the prison becomes a palace, our writer plunges his prisoners into palatial joys at the start: they do not fear the foulness nor the gloom; the prison shines with the glory of the Spirit, c. IV. "nec expavimus foedam loci illius nec caliginem. Moxque carcer tenebrosus Spiritu perlucante resplenduit, etc." This last description might be merely an improvement upon Perpetua; but when we go a little farther, we find the governor of the prison trying to starve the martyrs, and we have moreover a series of visions which are evidently suggested by those in the Acts of Perpetua. It is true that he does not directly imitate the Dinocrates-vision, but when one of the women-martyrs sees her son who has suffered before her sitting by the margin of waters and hears him speak to her: when a youth of amazing stature enters with cups in his hands, the draught from which does not diminish the supply (quae phialae non deficiebant), we know that the story of Dinocrates was in the mind of the writer and that he made the best use he could of his materials.

We might point out many more coincidences, but these will probably be sufficient, to shew that the Acts of Montanus, Lucius and their company are a deliberate forgery, based chiefly upon the Acts of Perpetua and Felicitas.

¹ Marquardt (*Röm. Staatsverwaltung*, i. p. 415, n. 3) quotes these Acts in order to establish the precedent!

Tertullian and the Acta Perpetuae.

It has been frequently suggested that there is some relation between Tertullian and the author of the Acts of Perpetua, and coincidences of language have been pointed out between the writings of the great African father and our Latin text, so as to support the thesis that perhaps the Acts themselves come from the pen of Tertullian. Now it will be evident that, if our hypothesis of a Greek original be correct, these arguments lose almost all their force. It is not indeed impossible that Tertullian may have been the author of Greek Acts, but we have no evidence by which to support the theory in the shape of a comparison between what he is known to have written and what he may be maintained to have written. So that the theory falls to the ground. There is, however, one direction in which we may find traces of Tertullian which has not, as far as we know, been pointed out previously.

If we are right in referring the martyrdom to any time near 200 A.D., and to any place near Carthage, it is extremely difficult to believe that so valiant a defender of the faith as Tertullian had nothing to do for the martyrs and nothing to say about them. It would be almost impossible that such should have been the case if he had been a pronounced Montanist at the time of the martyrdom, and when we reflect upon the difficulty with which any of his writings, except a very few tracts, can satisfactorily be labelled non-Montanist, we are obliged to admit that the tide of sympathy with the new movement must have set in some time before what the orthodox church writers are pleased to call 'his fall.' Thus it is in the highest degree probable that Tertullian would have in some way or other shewn sympathy with the imprisoned brethren and sisters. So far we are only reasoning generally, and after an *a priori* manner: but when we turn to Tertullian's writings we find one tract addressed directly to a group of martyrs in prison, which is singularly applicable to the circumstances of Perpetua and her friends; so that it furnishes at least a commentary, if not a historical supplement to the story of their sufferings.

In the tract *ad Martyras* we have very few direct allusions by which to fix its date; nor is this surprising, when we regard the brevity of its composition. It has been regarded by some as

amongst Tertullian's earliest works. This result is arrived at by the Oxford translators of Tertullian as follows: the tract belongs to a time of persecution; but no martyrs have already suffered, or they would have been named; therefore it is the commencement of a time of persecution. And since the closing words of the tract contain an encouragement to the martyrs on the ground that, even if they were not Christians, their lives would not necessarily be secure, as we see by the sudden removal of persons of all classes and conditions who have fallen under the condemnation of the government, it has been held that the tract refers to the suppression of the followers of Albinus and therefore to the year 197.

Now this reasoning is invalidated as regards the martyrs, first, because it has the usual weakness of an argument from silence, and secondly, because Tertullian does allude to previous martyrs in his opening remarks, where he says they have been in the habit of giving from their prison certificates of peace to lapsed members of the Church. But it is also weakened by the fact that the proscription and assassination of persons suspected by the government can hardly be held to have been ended in a single year; for the whole period with which we are concerned is rife with charges of treason. So that it does not seem necessary to put the date as far back as 197 A.D.

But now let us examine the tract a little more closely: and first we notice that it is divided into two parts by alternate addresses made to men and women. Thus in c. II. he addresses the martyrs as "blessed men," and so in the beginning of c. III. But in c. III. he changes the address from 'benedicti' to 'benedictae,' and it is clear that this need not be regarded as a copyist's error, since a little further on he brings in instances of female constancy such as Lucretia, in order that the blessed women might rival their own sex.

Now we conclude from this that the group of martyrs was composed both of men and women. But our Acts give no hint that women had suffered in the earlier part of the persecution with Iucundus, Artaxius and the rest. We should therefore be disposed to think that the women addressed were our own Perpetua and Felicitas. At all events they satisfy the condition.

But further the martyrs were many of them young, since Tertullian at the commencement of the second chapter says that

there were some hindrances of the soul which had come after them just as far as *their parents* had, viz. to the prison door. Whether he means to include parents amongst the hindrances left behind, as in Perpetua's case, is not clear; but the language implies that there was a large juvenile contingent amongst the martyrs. Now our Acts emphasize especially the youthfulness of this band of Christian soldiers.

The form of Tertullian's sympathy is dictated by the trials present and prospective of the martyrs. He commiserates them on the darkness and foulness of their prison. We must not unduly press such an exactness of agreement with the language of the Acts, for it is probable that all prisons were much the same in regard to light and sweetness. But we may say it is language very adapted to our martyrs which can speak as follows: "the world containeth the greater number of criminals, to wit the whole race of man: it awaiteth moreover the judgment not of the *proconsul* but of God. Wherefore, blessed men, consider that ye have been translated from a prison to a place, it may be, of safe keeping. *It hath darkness*, but ye yourselves are lights. *It hath bonds*, but ye have been made free by God. *An evil breath* is uttered there; but ye are a sweet savour. *A judge is looked for*, but ye shall judge even the judges themselves." Could anything be more appropriate to the condition of the martyrs from Thuburbo than this?

In the same way he touches on the suffering of their legs in the stocks, on the probability of their having to run the gauntlet under the whips of the *venatores* and the like.

But the greatest piece of evidence of all consists in the directions which Tertullian gives them to tread the dragon under foot in his own house. "Let him flee from your sight and hide himself in his utmost recess coiled up and listless like a serpent that hath been charmed and fumigated away." Read this by the side of Perpetua's account of the way in which, at the name of Jesus, she saw the dragon retreat beneath the ladder, so that she trod upon his head as she began her ascent, and one will be disposed to say that either the story of the ladder and the dragon had come to Tertullian's ears, or that his words had furnished the raw material, if we may so express it, for the vision which Perpetua saw.

The way in which Tertullian works out the figure of the

athletic contest in which the martyrs are engaged is very remarkable, because it runs parallel in some points with Perpetua's wrestling match with the Egyptian. It is true that the illustration is a sufficiently common one, and therefore coincidences are not to be pressed as they are in the previous illustration; but at all events let us look at them. According to our Acts, then, the last vision of Perpetua is a vision of her wrestling with the devil under the form of an Egyptian. A most beautiful youth attended by a band of beautiful companions appears as her trainer. Presently there enters a man of marvellous height, robed in purple of more than ordinary dignity, and holding the judge's staff in his hand.

The Latin version, not seeing the necessity apparently both for the youth of amazing beauty and the judge of amazing stature, has left out the former, furnishing thus only a bevy of young men for backers of the athlete. But one suspects that both God and Christ are represented in the vision: God the judge of all and Christ the trainer of the faithful. And when we turn to Tertullian we find as follows: "ye are about to undergo a good fight wherein the president is the Living God: the trainer, the Holy Spirit: the crown, eternity: the prize, of angelic being, the citizenship of the Heavens: the glory, for ever and ever. Wherefore your Master Christ Jesus, who hath given you the unction of the Spirit, hath brought you forth into this wrestling ground etc." Now we should infer from this that the youth of amazing beauty is either Christ or the Holy Spirit: and thus we are able to justify the Greek text against the Latin, and to shew a second case in which Tertullian's language is strikingly like the fabric of Perpetua's visions.

We are disposed to think that these agreements are sufficient to prove that the tract *ad Martyras* was written to Perpetua and her companions shortly after their removal to the military prison at Carthage. We know nothing that is foreign to such a hypothesis except that there is a lapse of some five or six years between the dates that have hitherto been ascribed respectively to the tract of Tertullian, and the martyrdom. But these dates, and especially the former, have still some measure of uncertainty attaching to them. We propose, therefore, to lower the date of the *ad Martyras* by the necessary interval for agreement with the martyrdom of Perpetua.

*On the relation of the Acts of Perpetua and Felicitas
to the Ignatian Controversy.*

The Acts of Perpetua and Felicitas have been brought into prominence in the great historical controversy as to the genuineness of the Ignatian epistles in two ways: first, to repel the charge of anachronism brought by Bochart against the epistle of Ignatius to the Romans on the ground of its use of the word "leopard", when this word was an artificial and late word not found earlier than the time of Constantine, the proper Greek word being *πάρδαλις*: secondly, they have been employed to demonstrate the antiquity of the Ignatian epistles by means of actual quotations from those epistles, or of parallelisms in language amounting to quotations, which occur in the current Acts of Perpetua and her companions.

Now it is not our business, certainly not here and now, to write our views on the Ignatian controversy: but it is well within our province to test any of the links in the historical argument evolved by Pearson, Usher and Lightfoot for the defence of the Ignatian epistles, where the arguments are based upon the text of which we give, as we believe, the first and authoritative form. We shall accordingly say a few words on each of the two questions referred to above.

And first with regard to the "ten leopards" of Ignatius.

Bochart in his *Hierozoicon* says as follows: "Leopardi vox serius usurpari coepit, nempe Constantini aevo. Proinde Ignatii ad Romanos Epistola quam circumferunt, eo demum saeculo fuisse scriptam vel ex hoc argumento colligas, quod Leopardorum diserte meminit."

If we may believe Pearson (*Vindiciae Ignatianae* II. 92) Bochart based this observation on a remark of Gesner's. Pearson wittily remarks that it is quite possible that the word 'leopard' does not exist in those Roman writers, earlier than the fourth century, who had been studied by Bochart; but there were other authors, of the period in question, whom Bochart had not read; some of them were no doubt lost, but there were extant a few authors who had used the word; "non legit, opinor, Bochartus, passiones SS. Perpetuae et Felicitatis primo in lucem ab Holstenio productam": he then quotes the numerous allusions to the

¹ Ign. *ad Rom.* v. "Bound to ten leopards" (*λεοπάργοις*).

‘leopard’ in our Acts and observes that the Acts were written one hundred years before the time of Constantine. Upon which Lightfoot remarks (*Ignatius* I. 397): “It is sufficient to say that Pearson at once proved the extravagance of this assertion by producing an example of the word as early as Severus (A.D. 202), and thus convicting Bochart of an error of a whole century at all events. I have been able to carry the evidence much farther back.”

Now we have the right to ask how the argument stands in the light of our recovered Greek Acts. If the Latin were the original, since there is, as far as we know, no suspicion that the text of the Passion is corrupt, then ‘leopardus’ is good Latin in the year 202 A.D.: and this means that it is possible in Greek long before the time mentioned by Bochart. But we have shewn that, so far from the Latin being the original text, it is a translation and as far as we can judge, by no means an early translation from the Greek. The idea that its language is closely parallel to Tertullian arises from the fact that Tertullian used the complete Acts of the Passion, and that some African Latin parallelisms can be traced between Tertullian’s works and the Latin Acts.

Turning now to the Greek Acts, we find everywhere instead of the word *λεόπαρδος* (which we should expect if that word were already current, and especially if the redactor of the Acts were acquainted, as Lightfoot affirms, with the Ignatian epistles and under their literary influence) the word *πάρδαλις*: and this at once disposes of the argument drawn by Pearson and Lightfoot against Bochart. Perpetua and Felicitas must not be any longer quoted in this argument; or, if quoted, they will be quoted on the other side.

Of course this does not settle the question; many things are still unsettled in the Ignatian controversy: the other instances brought forward by Lightfoot are probably correct; but, in any case, we do not discuss them. Before leaving this point we would, however, draw attention to one remark which Lightfoot makes on the disputed question, which seems to us by some oversight to have fallen a little short of the point which it was meant to establish. In *Ignatius* I. 398 he says, “Where the remains of contemporary literature are so few and fragmentary, intervals far longer than half a century constantly occur between the producible

instances of the use of particular words. One example will suffice. The Ignatian letter to the Ephesians on any showing was written before the middle of the third century when it is quoted by Origen. Yet the next example, after this Ignatian letter, of the use of the word *ἀναγωγεύς* in the same sense as 'a lifting-engine' (Ephes. 9), which the lexicographers produce, is in Eustathius a writer of the twelfth century."

It seems to us that the illustration given fails of its force in that (i) it makes a parallel case between a common word (*leopard*) and a very rare word (*ἀναγωγεύς*), which itself is being used in a technical sense. Are "lifting-engines" to be expected as frequently in literature as lions and tigers? But (ii), and this is the main point, it is not a question of the occurrence of a rare word, but a question of the occurrence of another very common word as an alternative for the word sought. We have no perplexity on this head with regard to the 'lifting-engine'; but on the other hand where the words 'leopardus' and its Greek form do not occur, there are plenty of pards and panthers and the like occurring as an equivalent description to 'leopard.' It seems therefore that Lightfoot's illustration is not quite adequate.

The second point of relationship between the Acts of Perpetua and Felicitas and the Ignatian Epistles consists in the assumed quotations which the Acts make from the letters.

These quotations are affirmed by Lightfoot, and they consist of one principal instance, and three minor references. The idea is that the Ignatian Epistles and especially the epistle to the Romans became a sort of 'vade-mecum' of martyrs (which is certainly true of many of the current *Acta Martyrum*), and so naturally coloured the thought and language of Perpetua and her companions.

In *Ignatius* I. 135 we have the references given as follows:

ACTS OF PERPETUA AND FELICITAS (c. A.D. 202).

"The expression 'ut bestias lucraretur' (§ 14) is probably taken from Rom. 5, *ὀναίμην τῶν θηρίων κ.τ.λ.*... These Acts likewise present other coincidences with the Epistles of Ignatius: e.g. § 10, 'Cooperunt me favitores oleo defrigere quomodo solent in agonem' (comp. Ephes. 3, *ἵπαλειφθῆναι* with the note), and § 18, 'Christi Dei' (comp. Trall. 7, Smyrn. 6, 10, with the note on Ephes. 1, below, II. p. 29 sq.)."

To the above we must add the following from vol. I. p. 335 note. "To the coincidences quoted above from the Acts of Perpetua and Felicitas should be added § 5, 'nos non in nostra potestate esse constitutos sed in Dei'; comp. Polyc. 7, *χριστιανὸς ἑαυτοῦ ἐξουσίαν οὐκ ἔχει ἀλλὰ Θεῷ σχολάζει*. This document is closely connected with Tertullian (see *de Anim.* 55): and the Ignatian Epistles, if known to the writers of these Acts, were likely to be known to this father also. Thus the parallels in the one tend to confirm the inference drawn from the parallels in the other."

Now with regard to these assumed quotations and references; the first, as will be seen from our Greek text, arises from a misunderstanding; 'ut bestias lucraretur' is a false translation for *κερδάνας τὸ μὴ θηριομαχεῖν*, and the martyr is not described in terms that are in any degree parallel to the Ignatian language; he simply has as his reward (in the fact of his dying in prison) that he was exempted from the conflict in the amphitheatre.

The third reference 'Christi Dei' arises from an error in the punctuation of the Latin text which should have a comma after 'Christi' so as to read 'ut matrona Christi, Dei dilecta'; some texts emphasize the punctuation by inserting a second 'ut' between 'Christi' and 'Dei.' It appears then that the two expressions are in apposition and the second is an explanation of the first. But it is more than an explanation, for a reference to the Greek shews that it is a mere gloss of the Latin translator. There is nothing in the Greek text to answer to 'Dei dilecta.'

The fourth instance quoted seems also to be a misunderstanding: the Greek text is, *γινῶθι γὰρ ὅτι οὐκ ἐν τῇ ἡμετέρᾳ ἐξουσίᾳ ἀλλ' ἐν τῇ τοῦ Θεοῦ ἐσόμεθα*, which must mean that *when the day of trial comes*, 'we shall be at God's disposal and not at our own.' Now this can hardly be deduced from the general proposition in the letter to Polycarp that 'a Christian is not at his own disposal but *devotes his time*' (so Lightfoot translates *σχολάζει*) 'to God.'

There remains, then, only the second of the instances given by Lightfoot, where he compares Act. Perpet. 10 with Ephes. 3. The figure, however, is such a common one (that of being oiled by one's trainer)¹, and the reading of the passage in the Ignatian

¹ The figure is found in Tertullian, *ad Martyras*, c. iii. which tract is closely connected with the time of Perpetua's imprisonment. But when Tertullian speaks of the good fight, in which the living God is the president, and the trainer the Holy Spirit, whose unction the martyrs have received, he is not quoting the Ignatian

letter is so doubtful withal, that I fancy this coincidence will hardly be pressed when it is seen how completely the appearance of the preceding parallelisms is changed by the introduction of the Greek text.

When Lightfoot's great work was first under the notice of the reviewers his use of the Acts of Perpetua was severely commented upon, if we remember rightly, by Hilgenfeld. The critic's objection was, we believe, widely sympathised with. We have now better means of determining whether it was well-founded or not. And in any case it can do no harm to draw attention to the point again.

As we have said above, our remarks are only meant as corrections to the great argument; they are not intended as a challenge to battle. If we honour and admire Dr Lightfoot's scholarship, we have also the good sense to fear him more than anything short of 'thunder and the sword of Michael.' And if we prize his personal kindness, we also remember that on the road by which our studies have in recent years taken us, we passed the 'slovenly unhandsome corse' of the author of *Supernatural Religion*¹.

Authorities for the text.

The Greek text is taken from a MS. in the library of the Convent of the Holy Sepulchre (Cod. S. Sep. 1). The MS. contains *βλῖοι καὶ μαρτυρίαι* for the month of February. It is labelled with the name of Symeon Metaphrastes, but inasmuch as the writing is of the tenth century at least the title must not be taken literally. Amongst the interesting matters in this Codex will be found on p. 136 the martyrdom of Polycarp (i.e. the letter of the Smyrneans). On pp. 144—173 the life of Porphyry of Gaza. On p. 173 Hippolytus, *De Christo et Antichristo*. The martyrdom of Perpetua will be found on p. 41 of the MS.

epistles. Indeed it is more likely than any other hypothesis that the Perpetua Acts are under the influence of this special tract of Tertullian. As we have said the figure is very ancient, one of the best cases of it is Ps.-Josephus, *De Maccabeis* § 18.

¹ These remarks were written and the substance of the argument communicated to the Society of Biblical Literature and Exegesis, before we had received the news of the immeasurable loss which the Christian world had sustained in the translation of Dr Lightfoot. There are others besides the bishops and clergy who stood around his grave in Auckland Chapel who can use the words "our dear father departed," and who can look back over the work that he did for the defence of learning and of religion, and say as Perpetua said, and without her touch of pity or of scorn, οὐχὶ σὺ πάπας ἡμέτερος εἶ;

The longer Latin version was discovered by Holstein in the monastery of Monte Cassino and published (? after his death), with his notes, by Valesius at Paris. This edition forms the basis of Ruinart's text in the *Acta Martyrum Sincera*. Ruinart used two other MSS.: one from the monastery of Salzburg, the other from the abbey of Compiègne. According to Aubé, the MS. 17626 (fonds latin) in the National Library at Paris belongs to the same group. We have not been able to do more with the Latin text than reprint Ruinart's authorities and correct some of the more evident errors of the Latin transcribers.

PASSIO S. PERPETVAE.

I. Si¹ vetera fidei exempla, et Dei gratiam testificantia et edificationem hominis operantia, propterea in litteris sunt digesta, ut lectione eorum quasi repraesentatione rerum et Deus honoretur et homo confortetur; cur non et nova documenta aequae utrique causae convenientia et digerantur? Vel quia et haec vetera futura quandoque sunt et necessaria posteris, si in praesenti suo tempore minori deputantur auctoritati, propter praesumptam venerationem antiquitatis. Sed viderint qui unam virtutem Spiritus huius Sancti pro aetatibus iudicent temporum; cum maiora reputanda sint novitiora quaeque ut novissimiora, secundum exuberationem gratiae in ultima saeculi spatia decretam². In novissimis enim diebus, dicit Dominus, effundam de Spiritu meo super omnem carnem, et prophetabunt filii filiaeque eorum, et super servos et ancillas meas de meo Spiritu effundam: et iuvenes visiones videbunt, et senes somnia somniabunt. Itaque et nos qui sicut prophetias, ita visiones novas pariter repromissas et agnoscimus et honoramus ceterasque virtutes Spiritus Sancti ad instrumentum Ecclesiae deputamus, cui et missus est, idem omnia donativa administrans in omnibus, prout unicuique distribuit Dominus, necessario et digerimus, et ad gloriam Dei lectione

¹ In the following notes H=Holstenius: S=cod. Salisburgensis: C=cod. Compendiensis.

² Codd. Ed. *decreta*.

PREF. Two prefatory notes are given in the Greek; one of which is the introduction of the Metaphrast, and the other of the prae-Metaphrast. *εὐλόγησον* is the proper ejaculation of the *ἀναγνώστης*.

C. I. Cf. the introduction to the Passion of Cyprian (Ruinar p. 179) where our Acts seem to be alluded to. "Certe durum erat, ut cum maiores nostri, *plebeiis* et *catechumenis* martyrium consecutis tantum honoris pro martyrii ipsius veneratione

ΜΑΡΤΥΡΙΟΝ ΠΕΡΠΕΤΟΥΑΣ.

[Μαρτύριον τῆς ἁγίας Περπετούας καὶ τῶν σὺν αὐτῇ τελειωθέντων ἐν Ἀφρικῇ. τῇ πρὸ τεσσάρων νόνων Φευρουαρίων. Εὐλόγησον.]

[Ἐπὶ Οὐαλεριάνου καὶ Γαληνοῦ διωγμὸς ἐγένετο ἐν ᾧ ἑμαρτύρησαν οἱ ἅγιοι Σάτυρος, Σάτουρνίνος, Ῥεουκάτος, Περπετούα, Φηλικητάτη, νόναις Φευρουαρίαις.]

I. Εἰ τὰ παλαιὰ τῆς πίστεως δόγματα, καὶ δόξαν Θεοῦ φανεροῦντα καὶ οἰκοδομὴν ἀνθρώποις ἀποτελοῦντα, διὰ τοῦτο ἐστὶ γεγραμμένα, ἵνα τῇ ἀναγνώσει αὐτῶν ὡς παρουσίᾳ τῶν πραγμάτων χρώμεθα καὶ ὁ θεὸς δοξασθῇ, διατὶ μὴ καὶ τὰ καινὰ παραδείγματα, ἅτε δὴ ἐκάτερα ἐργαζόμενα ὠφέλειαν, ὡσαύτως 5 γραφῇ παραδοθῇ; ἢ γὰρ τὰ νῦν πραχθέντα οὐ τὴν αὐτὴν παρρησίαν ἔχει, ἐπεὶ δοκεῖ πως εἶναι τὰ ἀρχαῖα σεμνότερα; πλὴν καὶ ταῦτα ὕστερόν ποτε γενόμενα παλαιά, ὡσαύτως τοῖς μεθ' ἡμᾶς γενήσεται καὶ ἀναγκαῖα καὶ τίμια. ἀλλ' ὅψανται οὔτινες μίαν δύναμιν ἐνὸς ἁγίου πνεύματος κατὰ τὰς ἡλικίας 10 κρίνουσι τῶν χρόνων, ὅτι δὴ δυνατώτερα ἔδει νοῆσθαι τὰ καινότερα, ὡς ἔχοντα αὐξανομένης τῆς χάριτος τῆς εἰς τὰ τέλη Acts ii. 17. τῶν καιρῶν ἐπηγγελμένης· ἐν ἐσχάταις γὰρ ἡμέραις, λέγει ὁ Κύριος, ἐγχεῶ ἀπὸ τοῦ πνεύματός μου ἐπὶ πᾶσαν σάρκα, καὶ προφητεύουσιν οἱ υἱοὶ ὑμῶν καὶ αἱ θυγατέρες ὑμῶν· καὶ οἱ 15 νεανίσκοι ὑμῶν ὁράσεις ὄψονται, καὶ οἱ πρεσβύτεροι ὑμῶν ἐνυπνίοις ἐνυπνισθήσονται. ἡμεῖς δὲ οὔτινες προφητείας καὶ ὁράσεις καινὰς δεχόμεθα καὶ ἐπιγινώσκουμεν καὶ τιμῶμεν πάσας τὰς δυνάμεις τοῦ ἁγίου πνεύματος, ὡς χορηγεῖ τῇ ἁγίᾳ ἐκκλησίᾳ πρὸς ἣν καὶ ἐπέμφθη, πάντα τὰ χαρίσματα ἐν πᾶσιν διοικοῦν, 20 ἐκάστῳ ὡς ἐμέρισεν ὁ θεός, ἀναγκαίως καὶ ἀναμνησκόμεν καὶ πρὸς οἰκοδομὴν εἰσάγομεν, μετὰ ἀγάπης ταῦτα ποιοῦντες εἰς

Praefatio. Γαληνοῦ. Σατουρνίλιος.	C. I, l. 1. εἶτα.	2. φανεροῦνται.
6. παραδοθεῖς.	11. ὅτε δέ.	13. ἐπηγγειλημένης.
		14. ἐγχεῶ.

dederint, ut de passionibus eorum multa, aut prope dixerim cuncta conscripserint, ut ad nostram quoque notitiam qui nondum nati fuimus pervenerint, Cypriani tanti sacerdotis et tanti martyris praeteriretur."

celebramus, ut ne qua aut imbecillitas, aut desperatio fidei apud veteres tantum aestimet gratiam divinitatis conversatam, sive martyrum, sive in revelationum dignatione: cum semper Deus operetur quae repromisit, non credentibus in testimonium, credentibus in beneficium. Et nos itaque quod audivimus et contrectavimus annuntiamus et vobis, fratres et filioli, ut et vos qui interfuistis, rememoremini gloriae Domini: et qui nunc cognoscitis per auditum, communionem habeatis cum sanctis martyribus, et per illos cum Domino Jesu Christo, cui est claritas et honor in saecula saeculorum. Amen.

II. Apprehensi sunt adolescentes catechumini, Revocatus et Felicitas conserva eius, Saturninus¹ et Secundulus. Inter quos et Vibia² Perpetua, honeste nata, liberaliter instituta, matronaliter nupta, habens patrem et matrem et fratres duos; alterum aequae catechuminum, et filium infantem ad ubera. Erat autem ipsa annorum circiter viginti duorum. Haec ordinem totum martyrii sui iam huic ipsa narrabit, sicut conscriptum manu sua et suo sensu reliquit.

III. Cum adhuc, inquit, cum persecutoribus essemus³, et me pater avertere⁴, et deicere pro sua affectione perseveraret: Pater,

¹ In H deest *Saturninus*.

² H habet *Inter hos Vibia Perpetua, honesta, liberaliter educata, matrona licet nupta.*

³ H, essem.

⁴ H, evertere cupiret.

C. II. Of the names given in the Acts, all can be paralleled from the African inscriptions.

Perhaps the best illustration can be taken from the inscriptions at Zanfur.

C. I. L. VIII, 1803

FELICITAS.

P. V. A.

H. S. E.

1808

D. M. S

Q. MAGNIVS

SATVRNINVS

P.V. AN. CV.

1817

D. M. S

REVOCATVS

V.A. XXV.

For the use of the term *σύνδουλοι* cf. the Numidian inscription 2296.

DIS MA S

FLORVS T FLAVI

T F MINIANI CI

SER. PIVS VIXIT

FORTVNATA

CONSERVA

PIO MARITO

MVNVMEN

TVM FEC

δόξαν Θεοῦ καὶ ἵνα μή πως ἡ ἀβεβαιοῦς τις καὶ ὀλιγόπιστος, ἡ καὶ τοῖς παλαιοῖς μόνον τὴν χάριν καὶ τὴν δύναμιν δίδοσθαι νομίσῃ, εἴτε ἐν τοῖς τῶν μαρτύρων εἴτε ἐν τοῖς τῶν ἀποκαλύψεων ἀξιώμασιν· πάντοτε ἐργαζομένου τοῦ θεοῦ ἃ ἐπηγγείλατο εἰς μαρτύριόν μὲν τῶν ἀπίστων εἰς ἀντίληψιν δὲ τῶν πιστῶν.

1 John i. 1—3. Καὶ ἡμεῖς ἃ ἠκούσαμεν καὶ ἑώρακαμεν καὶ ἐψηλαφήσαμεν εὐαγγελιζόμεθα ὑμῖν, ἀδελφοὶ καὶ τέκνα, ἵνα καὶ οἱ συμπαρόντες ἀναμνησθῶσιν δόξης Θεοῦ καὶ οἱ νῦν δι' ἀκοῆς γινώσκοντες κοινωνίαν ἔχῃτε μετὰ τῶν ἁγίων μαρτύρων καὶ δι' αὐτῶν μετὰ τοῦ Κυρίου ἡμῶν Ἰησοῦ Χριστοῦ, ᾧ ἡ δόξα εἰς τοὺς αἰῶνας τῶν αἰώνων. ἀμήν.

II. Ἐν πόλει Θουβουρβιτάνων τῇ μικροτέρᾳ συνελήφθησαν νεανίσκοι κατηχούμενοι, Ῥεουκάτος καὶ Φηλικητάτη, σύνδουλοι, καὶ Σατουρνῖνος, καὶ Σεκοῦνδος· μετ' αὐτῶν δὲ καὶ Οὐιβία 15 Περπετούα ἣτις ἦν γεννηθεῖσα εὐγενῶς καὶ τραφεῖσα πολυτελῶς γαμηθεῖσά τε ἐξόχως. Ἀὕτη εἶχεν πατέρα καὶ μητέρα καὶ δύο ἀδελφούς ὧν ὁ ἕτερος ἦν ὡσαύτως κατηχούμενος· εἶχεν δὲ καὶ τέκνον ὃ πρὸς τοῖς μασθοῖς ἔτι ἐθήλαζεν· ἣν δὲ αὕτη ἐτῶν εἴκοσι δύο· ἣτις πᾶσαν τὴν τάξιν τοῦ μαρτυρίου ἐντεῦθεν διηγῆσατο, 20 ὥς καὶ τῷ νοῦ αὐτῆς καὶ τῇ χειρὶ συγγράψασα κατέλιπεν οὕτως εἰποῦσα.

III. Ἐτι, φησὶν, ἡμῶν παρατηρουμένων ἐπεχειρεῖ ὁ πατήρ μοι λόγοις πείθειν με κατὰ τὴν ἑαυτοῦ εὐσπλαγχνίαν τῆς προκειμένης ὁμολογίας ἐκπεσεῖν· καὶ γὰρ πρὸς αὐτόν· Πάτερ, 25

- | | | |
|--------------------|--------------------------------|-----------------------------|
| 1. ἡ ἀβεβαιοῦστος. | 5. cod. εἰς ἀντιεἰς ἀντίληψιν. | C. II., l. 13. θουκριτανων. |
| 14. φηλικηκατη. | 15. Σατορνιλος. | 15. Ἰουλια καὶ Περπετουα. |
| 17. αὕτη. | 19. αὕτη. | 24. εὐσπλαχνιαν. |

I quote this inscription because it furnishes us with the suggestion that perhaps Revocatus may have been the husband of Felicitas; and also because it contains the name Minianus which is very like the perplexing Timinianus whom we find later on in the story.

For the name Felicitas as a slave's name see *C. I. L.* viii. 1897.

D. M. S
FELICITAS
V. A. iii. H.S.E
HILARVS AVGGG
LIB. VERNACVLAE
SVAE FEC.

inquo, vides, verbi gratia, vas hoc iacens, urceolum, sive aliud? Et dixit: Video, et ego dixi ei: Numquid alio nomine vocari potest, quam quod est? Et ait: Non. Sic et ego aliud me dicere non possum, nisi quod sum, Christiana. Tunc pater motus in hoc verbo, misit se in me ut oculos mihi erueret: sed vexavit tantum, et profectus¹ est victus cum argumentis diaboli. Tunc paucis diebus quod caruissem patre, Domino gratias egi, et refrigerata² sum absentia illius. In ipso spatio paucorum dierum baptizati sumus: mihi autem Spiritus dictavit, nihil aliud petendum ab³ aqua, nisi sufferentiam carnis. Post paucos dies recipimur in carcerem, et expavi quia numquam experta eram tales tenebras. O diem asperum! Aestus validos⁴ turbarum beneficio, concussuræ militum! Novissime macerabar sollicitudine infantis. Ibi tunc Tertius et Pomponius benedicti Diacones qui nobis ministrabant, constituerunt pretio, ut paucis horis emissi in meliorem locum carceris refrigeraremus. Tunc exeuntes de carcere universi sibi vacabant. Ego infantem lactabam jam inedia defectum. Sollicita pro eo adloquebar matrem, et confortabam⁵ fratrem commendabam filium. Tabescebam ideo quod illos tabescere videram mei beneficio. Tales sollicitudines multis diebus passa sum, et usurpavi ut mecum infans in carcere maneret; et statim convalui et relevata sum a labore et sollicitudine infantis: et factus est mihi carcer subito quasi praetorium, ut ibi mallem esse quam alibi⁶.

IV. Tunc dixit mihi frater meus: Domina soror, iam in magna dignitate⁷ es, tanta ut postules visionem, et ostendatur tibi, an passio sit, an commeatus. Et ego quae me sciebam fabulari cum Domino, cuius beneficia⁸ tanta experta eram, fidenter repromisi⁹ ei dicens: Crastina die tibi renuntiabo. Et postulavi, et ostensum est mihi hoc. Video scalam aeream¹⁰ mirae magni-

¹ H, profecto.

² H, refrigeravit.

³ Ed., in; H, ab.

⁴ H, validus.

⁵ S, et confortabam, fratri commendabam filium.

⁶ H, alicubi.

⁷ H, in magna dignatione es, tanta ut postulem.

⁸ S, beneficio.

⁹ S, repromissionibus ejus dixi.

¹⁰ Ed. and C, auream. S, aeream.

C. iv. This ladder appears again, rather unskillfully imitated in the Martyrdom of S. Sadoth and his companions in Persia (Ruinart, *Acta Sincera* p. 504): "Vidi in somniis hac nocte scalam cum magna gloria, cuius initium erat in caelo. Ei autem superstabat sanctus episcopus cum infinita gloria, ego vero infra in

ἔφην, ὁρᾷς λόγου χάριν σκεῦος κείμενον ἢ ἄλλο τι τῶν τοιούτων; κακείνος ἀπεκρίθη· Ὁρῶ· καὶ γὰρ· Ἄλλο ὀνομάζειν αὐτὸ μὴ θέμις; οὐδὲ δύναμαι, εἰ μὴ ὃ εἰμί, τουτέστι Χριστιανή.

Τότε ὁ πατήρ μου ταραχθεὶς τῷδε τῷ λόγῳ ἐπελθὼν ἠθέλησεν 5 τοὺς ὀφθαλμούς μου ἐξορύξαι· ἔπειτα μόνον κράζας, ἐξῆλθεν νικηθεὶς μετὰ τῶν τοῦ διαβόλου μηχανῶν.

Τότε ὀλίγας ἡμέρας ἀποδημήσαντος αὐτοῦ, ὑψαρίστησα τῷ Κυρίῳ καὶ ἦσθην ἀπόντος αὐτοῦ· καὶ ἐν αὐταῖς ταῖς ἡμέραις ἐβαπτίσθην· καὶ ἐμὲ ὑπηγόρευεν τὸ πνεῦμα τὸ ἅγιον μὴδὲν 10 ἄλλο αἰτήσασθαι ἀπὸ τοῦ ὕδατος τοῦ βαπτίσματος εἰ μὴ σαρκὸς ὑπομονήν. μετὰ δὲ ὀλίγας ἡμέρας ἐβλήθην εἰς φυλακὴν καὶ ἐξενίσθην· οὐ γὰρ πώποτε τοιοῦτον ἑωράκειν σκότος, ὡς δεινὴν ἡμέραν καὶνμά τε σφοδρόν, καὶ γὰρ ἀνθρώπων πλήθος ἦν ἐκεῖ ἄλλως τε καὶ στρατιωτῶν συκοφαντίαις πλείσταις· μεθ' ἃ δὴ 15 πάντα κατεπονούμην διὰ τὸ νήπιον τέκνον. τότε Τέρτιος καὶ Πομπόνιος, εὐλογημένοι διάκονοι οἱ δικόκουνον ἡμῖν, τιμὰς δόντες ἐποίησαν ἡμᾶς εἰς ἡμερώτερον τόπον τῆς φυλακῆς μεταχθῆναι. τότε ἀναπνοῆς ἐτύχομεν, καὶ δὴ ἕκαστοι προσαχθέντες ἐσχόλαζον ἑαυτοῖς· καὶ τὸ βρέφος ἠνέχθη πρὸς με, καὶ ἐπεδίδουν 20 αὐτῷ γάλα, ἥδη αὐχμῷ μαρανθέν· τῇ μητρὶ προσελάλουν, τὸν ἀδελφὸν προετρεπόμεν, τὸ νήπιον παρετιθέμεν· ἐτηκόμην δὲ ὅτι ἐθεώρουν αὐτοὺς δι' ἐμὲ λυπουμενούς· οὕτως περίλυπος πλείσταις ἡμέραις οὔσα, εἴθισα καὶ τὸ βρέφος ἐν τῇ φυλακῇ μετ' ἐμοῦ μένειν· κακείνο ἀνέλαβεν καὶ ἐγὼ ἐκουφίσθην ἀπὸ ἀνίας καὶ 25 πόνου, καὶ ἰδοὺ ἡ φυλακὴ ἐμοὶ γέγονεν πραιτώριον, ὡς μᾶλλον με ἐκεῖ θέλει εἶναι, καὶ οὐκ ἀλλαχοῦ.

IV. Τότε εἶπέν μοι ὁ ἀδελφός Κυρία ἀδελφή, ἥδη ἐν μεγάλῳ ἀξιώματι ὑπάρχεις τοσαύτη οὔσα ὡς εἰ αἰτήσεας ὀπτασίας, ὀπτασίαν λάβοις ἂν εἰς τὸ δειχθῆναί σοι εἶπερ 30 ἀναβολὴν ἔχεις ἢ παθεῖν μέλλεις. καὶ γὰρ ἥτις ᾗδεν με ὁμιλοῦσαν Θεῷ, οὐ γε δὴ τοσαύτας εὐεργεσίας εἶχον, πίστεως πλήρης οὔσα, ἐπηγγελάμην αὐτῷ εἰποῦσα· Αὐριὸν σοι ἀπαγγελῶ. ἤτησάμην δέ, καὶ ἐδείχθη μοι τοῦτο·

C. III., l. 1. κείμενον: forsitan addendum est ἢ ὀστράκινον. 6. μόνον.
12. ἐκληθῆμεν. 15. πλησται. 17. Παμπονιος. 24. ἦθησα.
C. IV., l. 29. αἰτήσεας. 31. ητις: cod. αἰτεῖς.

tudinis pertingentem usque ad caelum, et ita angustam, per quam nonnisi singuli ascendere possent: et in lateribus scalae omne genus ferramentorum infixum. Erant ibi gladii, lanceae, hami, macherae, ut si quis negligenter, aut non sursum adtendens ascenderet, laniaretur et carnes ejus inhaererent ferramentis. Et erat sub ipsa scala draco cubans mirae magnitudinis, qui ascendentibus insidias parabat¹, et exterrebat ne ascenderent. Ascendit autem Saturus prior, qui postea se propter nos ultro tradiderat, et tunc cum apprehensi sumus praesens non fuerat: et pervenit in caput scalae, et convertit se² et dixit mihi: Perpetua, sustineo te. Sed vide ne te mordeat draco ille. Et dixi ego: Non me nocebit in nomine Domini Jesu Christi. Et desub ipsa scala quasi timens me, lente³ elevavit caput: et cum primum gradum calcassem, calcavi illius caput. Et ascendi, et vidi spatium horti immensum, et in medio horti sedentem hominem canum, in habitu pastoris, grandem, oves mulgentem: et circumstantes candidatos millia multa. Et levavit caput et adspexit me, et dixit mihi: Bene venisti, tignon. Et clamavit me, et de caseo quod mulgebat dedit mihi quasi buccellam, et ego accepi iunctis manibus, et manducavi: et universi circumstantes dixerunt, Amen. Et ad sonum vocis experrecta sum, commanducans adhuc dulcis nescio quid. Et retuli statim fratri meo, et intelleximus passionem esse futuram. Et coepimus nullam iam spem in saeculo habere.

V. Post paucos dies rumor cucurrit ut audiremur. Super-venit autem et de civitate pater meus, consumptus taedio, ascendit ad me ut me deiceret, dicens: Miserere, filia, canis meis; miserere patri, si dignus sum a te pater vocari. Si his te manibus ad hunc

¹ H, praestabat.

² Ed. addit *ad me*, quod in H deest.

³ H, lente ejecit caput, et quasi primum.

¹ *Ἀμήν*. The 'Amen' shews that she is describing the reception of the Eucharist. This is also evident from the joined or crossed hands with which the fragment was received. Even in S. Paul's time the Eucharistic Amen was a prominent feature of the Service: the unlearned or private persons joined in it ("else how could the unlearned say the Amen at thy Thanksgiving," 1 Cor. xiv. 16). The utterance of this Amen is commonly spoken of by the Fathers as a shout, and here also the whole company join in it so that we need not be surprised that at this point Perpetua waked. If it appears strange that this Amen should in the vision follow the participation in the elements, instead of forming a part of the consecration, we have only to remember that the same thing occurs in the Teaching of the Apostles ("after ye are filled, give thanks as follows"). The rapidity of the action from the reception of the elements to the close of the ritual is a characteristic of the world of visions. On account of their use of bread and

Εἶδον κλίμακα χαλκῆν θαυμαστοῦ μήκους· ἥς τὸ μῆκος ἄχρις οὐρανοῦ· στενὴ δὲ ἦν ὡς μηδένα δι' αὐτῆς δύνασθαι εἰ μὴ μοναχὸν ἓνα ἀναβῆναι· ἐξ ἑκατέρων δὲ τῶν τῆς κλίμακος μερῶν πᾶν εἶδος ἦν ἐμπεπηγμένον ἐκεῖ ξιφῶν δοράτων ἀγκίστρων μαχαιρῶν ὀβελίσκων· ἵνα πᾶς ὁ ἀναβαίνων ἀμελῶς καὶ μὴ 5 ἀναβλέπων τοῖς ἀκοντίοις τὰς σάρκας σπαραχθεῖη· ἦν δὲ ὑπ' αὐτῇ τῇ κλίμακι δράκων ὑπερμεγέθης, ὃς δὴ τοὺς ἀναβαίνοντας ἐνῆδρευνεν ἐκθαμβῶν ὅπως μὴ τολμῶσιν ἀναβαίνειν· ἀνέβη δὲ ὁ Σάτυρος· ὃς δὴ ὕστερον δι' ἡμᾶς ἐκὼν παρέδωκεν ἑαυτόν· αὐτοῦ γὰρ καὶ οἰκοδομὴ ἦμεν· ἀλλ' ὅτε συνελήφθημεν ἀπὴν· ὡς οὖν 10 πρὸς τὸ ἄκρον τῆς κλίμακος παρεγένετο, ἐστράφη, καὶ εἶπεν· Περπετούα, περιμένω σε· ἀλλὰ βλέπε μή σε ὁ δράκων δάκῃ· καὶ εἶπον· Οὐ μὴ με βλάβῃ, ἐν ὀνόματι Ἰησοῦ Χριστοῦ. Καὶ ὑποκάτω τῆς κλίμακος ὥσει φοβούμενός με ἡρέμα τὴν κεφαλὴν προσήνεγκεν· καὶ ὡς εἰς τὸν πρῶτον βαθμὸν ἠθέλησα ἐπιβῆναι 15 τὴν κεφαλὴν αὐτοῦ ἐπάτησα· [καὶ ἀνέβην] καὶ εἶδον ἐκεῖ κῆπον μέγιστον καὶ ἐν μέσῳ τοῦ κήπου ἄνθρωπον πολὺν καθεζόμενον ποιμένος σχῆμα ἔχοντα ὑπερμεγέθῃ ὃς ἤλμευγε τὰ πρόβατα· περιεστῆκεισαν δὲ αὐτῷ πολλαὶ χιλιάδες λευχειμονούντων· ἐπάρας δὲ τὴν κεφαλὴν ἐθεάσατό με καὶ εἶπεν· Καλῶς ἐλήλυθας, 20 τέκνον· καὶ ἐκάλεσέν με, καὶ ἐκ τοῦ τυροῦ οὗ ἤλμευγεν ἔδωκέν μοι ὥσει ψωμίον· καὶ ἔλαβον ζεύξασα τὰς χεῖράς μου καὶ ἔφαγον· καὶ εἶπαν πάντες οἱ παρεστῶτες Ἀμήν.

Καὶ πρὸς τὸν ἦχον τῆς φωνῆς ἐξυπνίσθην ἔτι τί ποτε μασωμένη γλυκύ· καὶ εὐθέως διηγησάμην τῷ ἀδελφῷ καὶ 25 ἐνόησαμεν ὅτι δέοι παθεῖν· καὶ ἡρξάμην ἕκτοτε μηδεμίαν ἐλπίδα ἐν τῷ αἰῶνι τούτῳ ἔχειν.

V. Μετὰ δὲ ἡμέρας ὀλίγας ἔγνωμεν μέλλειν ἡμᾶς ἀκουσθήσεσθαι· παρεγένετο δὲ καὶ ὁ πατὴρ ἐκ τῆς πολλῆς ἀποδημίας μαραινόμενος καὶ ἀνέβη πρὸς με προτρεπόμενός με καταβαλεῖν, 30 λέγων· Θύγατερ, ἐλέησον τὰς πολιὰς μου, ἐλέησον τὸν πατέρα σου, εἴπερ ἄξιός εἰμι ὀνομασθῆναι πατὴρ σου, μνήσθητι ὅτι ταῖς

1. κλημα καχαλκην. 3. κληματος. 4. αγκιστρων. 13. deest.
16. deest καὶ ἀνέβην (cf. Lat. et ascendi). 19. λευσχημονονούντων.
26. εννοησαμεν.

cheese in the Eucharist, the Montanists obtained the nickname of Ἀρτοϋρῖται. See Epiph. Haer. 49. 2. The explanation which was given of this curious custom in later times refers it to an assimilation of the Eucharistic oblation to the offerings of primitive man, viz.: the fruits of field and flock; but this is very doubtful; and it is probable that the true explanation is historical rather than theological.

florem aetatis provexi; si te praeposui omnibus fratribus tuis, ne me dederis in dedecus hominum. Aspice ad fratres tuos, aspice ad matrem tuam et materteram, aspice ad filium tuum qui post te vivere non poterit. Depone animos. Ne¹ universos nos extermines: nemo enim nostrum libere loquetur, si tu aliquid fueris passa. Haec dicebat pater pro sua pietate basians mihi manus; et se ad pedes meos iactans, et lacrymis non filiam, sed dominam me vocabat. Et ego dolebam causam² patris mei, quod solus de passione mea gavisurus non esset de toto genere meo; et confortavi eum, dicens: Hoc fiet in illa catasta quod Deus voluerit. Scito enim nos non in nostra potestate esse constitutos, sed in Dei. Et recessit a me contristatus.

VI. Alio die cum pranderemus, subito rapti sumus ut audiremur, et pervenimus ad forum. Rumor statim per vicinas fori partes cucurrit, et factus est populus immensus. Ascendimus in catastam³. Interrogati ceteri confessi sunt. Ventum est et ad me. Et apparuit pater illico cum filio meo, et extraxit me de gradu, et dixit supplicans: Miserere infanti⁴. Et Hilarianus⁵ Procurator, qui tunc loco proconsulis Minuci Timiniani defuncti ius gladii acceperat: Parce, inquit, canis patris tui, parce infantiae pueri. Fac sacrum pro salute Imperatorum. Et ego respondi: Non facio. Hilarianus, Christiana es? inquit. Et ego respondi: Christiana sum. Et cum staret pater ad me deiciendam, iussus est ab Hilariano deici, et virga percussus est. Et doluit mihi casus patris mei, quasi ego fuissem percussa: sic dolui pro senecta

¹ S and C, et noli nos universos exterminare.

² Ed. canos. H, causam.

³ Ed., in catasta. S, catastam. C, in catastam.

⁴ C and S habent *canos meos* pro *infanti*.

⁵ S semper habet *Elarianus*, C Helarianus.

C. v. "Catasta" seems to be the regular African term for the platform in front of the judge, or as we should say, the bar. Cf. Augustin. in Ps. 137 (de martyre Crispina), "Gaudebat Crispina eum ligata producebatur, cum in catasta levabatur, eum audiebatur, eum damnabatur."

τοὺς θυμούς. This seems to be rendered 'presumptio' in the Acta Montani.

C. vi. A similar case of the delegation of Proconsular powers will be found in the Acta S. Montani (Ruinar p. 201): "et continuo eadem die subito rapti sumus ad Procuratorem qui defuncti Proconsulis partes administrabat." The evidence of this particular document is however vitiated by the suspicion that the author imitates the Acts of Perpetua.

τῶν δορυφόρων τις ἐτύπτησεν. Cf. Ps.-Josephus *De Maccab.* 6, *λάξ γέ τοι τῶν*

χερσὶν ταύταις πρὸς τὸ τοιοῦτον ἄνθος τῆς ἡλικίας ἀνήγαγόν σε· καὶ προειλόμην σε ὑπὲρ τοὺς ἀδελφούς σου· [ὄρα τοὺς ἀδελφούς σου,] ὄρα τὴν σὴν μητέρα καὶ τὴν τῆς μητρός σου ἀδελφήν, ἴδε τὸν υἱόν σου ὃς μετὰ σέ ζῆν οὐ δύναται· ἀπόθου τοὺς θυμούς καὶ μὴ ἡμᾶς πάντας ἐξολοθρεύσης· οὐδεὶς γὰρ 5 ἡμῶν μετὰ παρρησίας λαλήσει ἐάν τί σοι συμβῇ.

Ταῦτα ἔλεγεν ὡς πατήρ κατὰ τὴν τῶν γονέων εὐνοίαν· καὶ κατεφίλει μου τὰς χεῖρας καὶ ἑαυτὸν ἔρριπτεν ἔμπροσθεν τῶν ποδῶν μου καὶ ἐπιδακρύων οὐκέτι με θυγατέρα ἀλλὰ κυρίαν ἐπεκάλει· ἐγὼ δὲ περὶ τῆς διαθέσεως τοῦ πατρὸς ἤλγουν, ὅτι ἐν 10 ὄλῳ τῷ ἐμῷ γένει μόνος οὐκ ἡγαλλιᾶτο ἐν τῷ ἐμῷ πάθει. παρεμυθησάμην δὲ αὐτὸν εἰποῦσα· Τοῦτο γενήσεται ἐν τῷ βήματι ἐκείνῳ ἐὰν θέλῃ ὁ κύριος· γινώθι γὰρ ὅτι οὐκ ἐν τῇ ἡμετέρᾳ ἐξουσίᾳ, ἀλλ' ἐν τῇ τοῦ θεοῦ ἐσόμεθα· καὶ ἐχωρίσθη 15 ἀπ' ἐμοῦ ἀδελμονῶν.

VI. Καὶ τῇ ἡμέρᾳ ἐν ᾗ ὄριστο ἡρπάγημεν ἵνα ἀκουσθῶμεν· καὶ ὥσπερ ἐγενήθημεν εἰς τὴν ἀγοράν, φήμη εὐθὺς εἰς τὰ ἐγγὺς μέρη διήλθεν καὶ συνέδραμεν πλείστος ὄχλος· ὡς δὲ ἀνέβημεν εἰς τὸ βῆμα ἐξετασθέντες οἱ λοιποὶ ὡμολόγησαν· ἡμελλον δὲ καὶ ἐξετάζεσθαι· καὶ ἐφάνη ἐκεῖ μετὰ τοῦ τέκνου μου ὁ πατήρ· 20 καὶ καταγαγὼν με πρὸς ἑαυτόν, εἶπεν· Ἐπίθυσον ἐλεήσασα τὸ βρέφος. καὶ Ἰλαρίανος ἐπίτροπος, ὃς τότε τοῦ ἀνθυπάτου ἀποθανόντος Μινουκίου Ὀππιάνου ἐξουσίαν εἰλήφει μαχαίρας, λέγει μοι· Φεῖσαι τῶν πολιῶν τοῦ πατρός σου· φεῖσαι τῆς τοῦ παιδίου νηπιότητος· ἐπίθυσον ὑπὲρ σωτηρίας τῶν αὐτοκρατόρων. 25 καὶ γὰρ ἀπεκρίθην· Οὐ θύω. καὶ εἶπεν Ἰλαρίανος· Χριστιανὴ εἶ; καὶ εἶπον· Χριστιανὴ εἴμι. καὶ ὡς ἐσπούδαζεν ὁ πατήρ μου καταβαλεῖν [ἀπὸ τῆς ὁμολογίας], κελεύσαντος Ἰλαριάνου ἐξεβλήθη· προσέτι δὲ καὶ τῇ ῥάβδῳ τῶν δορυφόρων τις ἐτύπησεν αὐτόν· καὶ γὰρ σφόδρα ἤλγησα, ἐλεήσασα τὸ γῆρας αὐτοῦ· τότε 30

2. omisit cod. ὅρα τοὺς ἀδελφούς σου per ὁμοιοτελευτον. Cf. Lat. C. vi.
I. 16. Interpres latinus legit ἐν ᾧ ἤριστων. 18. πληστος. 22. Ἰλαριανοστις.
23. Οπιανου. 26. ηλαριανος. 28. ἀπο της ὁμολογιας: forsitan additamentum.

πικρῶν τις δορυφόρων εἰς τοὺς κενεῶνας ἐναλλόμενος ἔτυπτεν, and 17, ἔλεγον δὲ καὶ τῶν δορυφόρων τινές. It is certain that almost all the early Christian martyrologies are under the influence of the Maccabee legends. Several of the apocryphal martyrdoms such as the Passion of S. Symphorosa and the story of Felicitas and her seven sons are direct imitations of these Jewish martyrdoms. In other cases their

eius misera. Tunc nos universos pronuntiat, et damnat ad bestias, et hilares descendimus ad carcerem. Tunc quia consueverat a me infans mammas accipere, et mecum in carcere manere; statim mitto ad patrem Pomponium¹ diaconum, postulans infantem: sed pater dare noluit, et quomodo Deus voluit, neque ille amplius mammas desideravit; neque mihi fervorem fecerunt: ne sollicitudine infantis et dolore mammarum macerarer.

VII. Post dies paucos, dum universi oramus, subito media oratione profecta est mihi vox, et nominavi Dinocratem: et obstupui quod numquam mihi in mentem venisset nisi tunc, et dolui commemorata casus eius. Et cognovi me statim dignam esse, et pro eo petere² debere. Et coepi pro ipso orationem facere multum, et ingemiscere ad Dominum. Continuo ipsa nocte ostensum est mihi hoc in oramate: Video Dinocratem exeuntem de loco tenebroso, ubi et complures³ erant, aestuantem et sitientem valde, sordido vultu, et colore pallido, et vulnus in facie eius quod cum moreretur habuit. Hic Dinocrates fuerat frater meus carnalis, annorum septem, qui per infirmitatem facie cancerata⁴ male obiit, ita ut mors eius odio fuerit omnibus hominibus. Pro hoc ego orationem feceram: et inter me et illum grande erat diastema⁵ ita ut uterque ad invicem accedere non possemus. Erat deinde in ipso loco ubi Dinocrates erat, piscina plena aqua, altiorem marginem habens quam erat statura pueri, et extendebat se Dinocrates quasi bibiturus. Ego dolebam quod et piscina illa aquam habebat, et tamen propter altitudinem marginis bibiturus non esset. Et experrecta sum, et cognovi fratrem meum laborare. Sed confidebam⁶ me profuturam labori eius, et orabam pro eo omnibus diebus quousque transivimus in carcerem castrensem. Munere enim castrensi eramus pugnaturi. Natale tunc Getae Cacsaris,

¹ C, Pompinianum.

² S, pati.

³ H, complura erant loca tenebrosa.

⁴ S, macerata.

⁵ Sic suspicatur Holsten. S, dianten. Ed., diadema.

⁶ S, considerabam. H, fidebam me profuturam labori.

influence is no less marked, as in the case of the Acts of SS. Jacobus, Marianus &c., (Ruinart, *Acta Sinc.* p. 199), "his peractis *Maccabaico gaudio* Mariani mater exultans &c." and in the Acts of SS. Montanus, Lucius etc. (Ruinart p. 205), "O Maccabaicam matrem &c." We are inclined then to believe that the language of our Acts is coloured here by reminiscence of the Acts of the Maccabees. It is true that the father of Perpetua does not make an exact parallel with the aged Eleazar, for he is not a Christian; but the preceding sentences in the Acts have a further

ἡμᾶς πάντας πρὸς θηρία κατακρίνει· καὶ χαίροντες κατήμεν εἰς φυλακὴν.

Ἐπειδὴ δὲ ὑπ' ἐμοῦ ἐθηλάζετο τὸ παιδίον, καὶ μετ' ἐμοῦ ἐν τῇ φυλακῇ εἰώθει μένειν, πέμπω πρὸς τὸν πατέρα μου Πομπόνιον διάκονον, αἰτοῦσα τὸ βρέφος· ὁ δὲ πατήρ οὐκ ἔδωκεν· πλὴν ὡς 5 ὁ θεὸς ὠκονόμησεν οὔτε ὁ παῖς μασθοὺς ἐπεθύμησεν ἔκτοτε, οὔτε ἐμοὶ τις προσγένονεν φλεγμονή· ἴσως ἵνα [μὴ] καὶ τῇ τοῦ παιδίου φροντίδι καὶ τῇ τῶν μασθῶν ἀλγηδόνι καταπονῆθῃ.

VII. Καὶ μετ' ὀλίγας ἡμέρας προσευχομένων ἡμῶν ἀπάντων ἐξαίφνης ἐν μέσῳ τῆς προσεύχης ἀφήκα φωνὴν καὶ ὠνόμασα 10 Δεινοκράτην. καὶ ἑκθαμβος ἐγενήθη, διότι οὐδέποτε εἰ μὴ τότε ἀνάμνησιν αὐτοῦ πεποιήκειν· ἤλγησα δὲ εἰς μνήμην ἐλθοῦσα τῆς αὐτοῦ τελευτῆς. πλὴν εὐθέως ἔγνων ἐμαυτὴν ἀξίαν οὔσαν αἰτήσιν ποιήσασθαι περὶ αὐτοῦ, καὶ ἠρξάμην πρὸς Κύριον μετὰ στεναγμῶν προσεύχεσθαι τὰ πλεῖστα· καὶ εὐθέως αὐτῇ τῇ 15 νυκτὶ ἐδηλώθη μοι τοῦτο. ἴρῳ Δεινοκράτην ἐξερχόμενον ἐκ τόπου σκοτεινοῦ, ὅπου καὶ ἄλλοι πολλοὶ καυματιζόμενοι καὶ διψῶντες ἦσαν, ἐσθῆτα ἔχοντα ῥυπαράν· ὥχρὸν τῇ χροᾷ· καὶ τὸ τραῦμα ἐν τῇ ὄψει αὐτοῦ περιὸν ἔτι, ὅπερ τελευτῶν εἶχεν· (οὗτος δὲ ὁ Δεινοκράτης, ὁ ἀδελφός μου κατὰ σάρκα, ἐπταετῆς 20 τεθυῖκε ἀσθενήσας καὶ τὴν ὄψιν αὐτοῦ γαγγραινὴ σαπῆις ὡς τὸν θάνατον αὐτοῦ στυγερὸν γενέσθαι πᾶσιν ἀνθρώποις) ἐθεώρουν οὖν μέγα διάστημα ἀνὰ μέσον αὐτοῦ καὶ ἐμοῦ, ὡς μὴ δύνασθαι ἡμᾶς ἀλλήλοις προσελθεῖν. ἐν ἐκείνῳ δὲ τῷ τόπῳ ἐν ᾧ ἦν ὁ ἀδελφός μου κολυμβήθρα ἦν ὕδατος πλήρης· 25 ὑψηλωτέραν δὲ εἶχεν τὴν κρηπίδα ὑπὲρ τὸ τοῦ παιδίου μήκος· πρὸς ταύτην ὁ Δεινοκράτης διετείνετο πιεῖν προαιρούμενος· ἐγὼ δὲ ἤλγουν διότι καὶ ἡ κολυμβήθρα ἦν πλήρης ὕδατος, καὶ τὸ παιδίον οὐκ ἠδύνατο πιεῖν διὰ τὴν ὑψηλότητα τῆς κρηπίδος· καὶ ἐξυπνίσθη. 30

Luke xvi.
24.

Luke xvi.
26.

Καὶ ἔγνων κάμνειν τὸν ἀδελφόν μου· ἐπεποίθην δὲ δύνασθαι με αὐτῷ βοηθῆσαι ἐν ταῖς ἀνὰ μέσον ἡμέραις, ἐν αἷς κατήχθημεν εἰς τὴν ἄλλην φυλακὴν τὴν τοῦ χιλιάρχου· ἐγγὺς γὰρ ἦν τῆς παρεμβολῆς οὗ ἡμέλλομεν θηριομαχεῖν· γενέθλιον γὰρ

6. Cod. ^εουται. 7. μὴ deest in cod. C. vii., l. 19. Cod. τελευτων, σπερ
περιων ετι ειχεν. 20. os αδελφος.

analogy with the Jewish legend, since πείσθητι ταῖς τοῦ βασιλέως ἐντολαῖς in one text is not unlike in idea to the ἐπίθυσον ὑπὲρ σωτηρίας τῶν αὐτοκρατόρων.

et feci pro illo orationem die et nocte gemens et lacrymans ut mihi donaretur.

VIII. Die autem quæ in nervo mansimus, ostensum est mihi hoc. Video locum illum quem retro videram tenebrosum, esse lucidum; et Dinocratem mundo corpore, bene vestitum, refrigerantem, et ubi erat vulnus, video cicatricem; et piscinam illam quam retro videram, summisso margine usque ad umbilicum pueri; et aquam de ea trahebat sine cessatione, et super margine phiala erat aurea¹ plena aqua; et accessit Dinocrates, et de ea bibere coepit, quæ phiala non deficiebat. Et satiatus abscessit de aqua ludere more infantium gaudens, et experfecta sum. Tunc intellexi translatum eum esse de poena.

IX. Deinde post dies paucos Pudens², miles Optio, prae-positus carceris, qui nos³ magni facere coepit intelligens magnam virtutem Dei esse in nobis, multos fratres ad nos admittebat, ut et nos et illi invicem refrigeraremus. Ut autem proximavit dies muneris, intravit ad me pater meus consumtus taedio, et coepit barbam suam evellere, et se in terram mittere, et prosternere se in faciem, et impropere annis suis, et dicere tanta verba, quæ moverent universam creaturam. Ego dolebam pro infelici senecta eius.

X. Pridie quam pugnaremus, video in oramate huc venisse Pomponium diaconum ad ostium carceris, et pulsare vehementer; exivi ad eum, et aperui ei: qui erat vestitus distinctam candidam, habens multiplices caligulas⁴. Et dixit mihi: Perpetua te ex-

¹ Sic H. In Ed. deest.

² S, Prudens.

³ H, qui nos magnificiebat; capit intelligere magnam virtutem esse in nobis, qui multos ad nos.

⁴ S, galliculas. Ed., calliculas.

C. VIII. ἐν νέρβις. We need not be surprised at the Latinism which can be paralleled from similar writings to our own. It is interesting to note that Tertullian in his tract *ad Martyras* written about this time to a band of martyrs in prison at Carthage sympathises with them over their suffering in the stocks; but remarks that if the mind be in Heaven, the leg will not really suffer upon earth.

φιάλη μεστή. Cf. *Passio Cypriani* 197, "tunc ibi Cyprianus phialam quæ super marginem fontis iacebat, arripuit: et cum illam de fontis rivulis implexisset, hausit."

C. IX. *Optio*. The earlier commentators seem to have been puzzled over this word as applied to a prison official, though they were able to quote a passage from Ambrose, *Ep. ad Ephes.* c. 4, where *optio carceris* is used. A reference to the African inscriptions will shew that it was a very common word indeed, and just the word to be used either by a writer of Latin Acts or a translator of Greek Acts at this point. It is the general word for any lieutenant of a higher officer. *C. I. L.* VIII. 2482 has no less than four *Optiones*, all from the same legion and engaged in the same votive offering. This inscription belongs to the time of

ἡμελλεν ἐπιτελεῖσθαι [Γέτα] Καίσαρος. εἶτα προσευξαμένη μετὰ στεναγμῶν σφοδρῶς περὶ τοῦ ἀδελφοῦ μου ἡμέρας τε καὶ νυκτὸς δωρηθῆναί μοι αὐτὸν ἠξίωσα.

VIII. Καὶ εὐθὺς ἐν τῇ ἐσπέρᾳ ἐν ᾗ ἐν νέρβῳ ἐμείναμεν, ἐδείχθη μοι τοῦτο.

5

Ὅρῳ τὸν τόπον ἐν ᾧ ἐωράκειν τὸν Δεινοκράτην [φωτεινὸν ὄντα, καὶ τὸν Δεινοκράτην] καθαρῷ σώματι ὄντα, καὶ καλῶς ἡμφιεσμένον καὶ ἀναψύχοντα· καὶ ὅπου τὸ τραῦμα ἦν οὐλὴν ὀρῶ· καὶ ἡ κρηπὶς τῆς κολυμβήθρας κατήχθη ἕως τοῦ ὀμφαλίου αὐτοῦ· ἔρρεεν δὲ ἐξ αὐτῆς ἀδιαλείπτως ὕδωρ· καὶ ἐπάνω τῆς κρη- 10 πίδος ἦν χρυσὴ φιάλη μεστή· καὶ προσελθὼν ὁ Δεινοκράτης ἤρξατο ἐξ αὐτῆς πίνειν· ἡ δὲ φιάλη οὐκ ἐνέλειπεν· καὶ ἐμπλησθεὶς ἤρξατο παίζειν ἀγαλλιώμενος ὡς τὰ νήπια· καὶ ἐξυπνίσθην.

Καὶ ἐννόησα ὅτι μετετέθη ἐκ τῶν τιμωριῶν.

IX. Καὶ μετ' ὀλίγας ἡμέρας Πούδης τις στρατιώτης ὁ τῆς 15 φυλακῆς προιστάμενος μετὰ πολλῆς σπουδῆς ἤρξατο ἡμῖς τιμᾶν καὶ δοξάζειν τὸν θεόν, ἐννοῶν δύναμιν μεγάλην εἶναι περὶ ἡμᾶς· διὸ καὶ πολλοὺς εἰσελθεῖν πρὸς ἡμᾶς οὐκ ἐκώλυεν εἰς τὸ ἡμᾶς διὰ τῶν ἐπαλλήλων παραμυθιῶν παρηγορεῖσθαι. ἠγγισεν δὲ ἡ ἡμέρα τῶν φιλοτιμιῶν καὶ εἰσέρχεται πρὸς με ὁ πατήρ, τῇ 20 ἀκηδία μαρανθεὶς, καὶ ἤρξατο τὸν πώγοντα τὸν ἴδιον ἐκτίλλειν, ῥίπτειν τε ἐπὶ γῆς, καὶ πρηνὴς κατακείμενος κακολογεῖν τὰ ἑαυτοῦ ἔτη κατηγορῶν καὶ λέγων τοιαῦτα ῥήματα ὡς πᾶσαν δύνασθαι τὴν κτίσιν σαλεῦσαι· ἐγὼ δὲ ἐπένθουν διὰ τὸ ταλαί- 25 πορον γῆρας αὐτοῦ.

25

X. Πρὸ μῆς οὖν τοῦ θηριομαχεῖν ἡμᾶς, βλέπω ὄραμα τοιοῦτον.

Πομπόνιος ὁ διάκονος, φησὶν, ἦλθεν πρὸς τὴν θύραν τῆς φυλακῆς καὶ ἔκρουσεν σφόδρα· ἐξελθοῦσα ἡνοιξα αὐτῷ· καὶ ἦν ἐνδεδυμένος ἐσθῆτα λαμπράν καὶ περιεζωσμένος· εἶχεν δὲ ποικίλα ὑποδήματα καὶ λέγει μοι· Σὲ περιμένω, ἐλθέ. 30

1. Cod. om. Γετα, quia in pref. Valerianum et Gallienum nominavit. C. viii., l. 6. τον τοπον. Cod. τοπω: cod. om. φωτεινὸν ὄντα καὶ τὸν Δεινοκράτην per ὁμοιολετυον. Cf. Lat. 7. καλλως. C. ix., l. 15. πουδης τιρατιωτης (sic). 16. Cod. add. της ante σπουδης.

Valerian and Gallienus. It does not however seem to be a very early military term; indeed Festus says "*optio, qui nunc dicitur, antea appellabatur adensus; is adiutor centurioni dabatur a tribuno militum.*" This agrees with what we find in C. vii., that they had been removed from the common prison *eis tēn φυλακὴν τοῦ χιλάρχου*. We may add that in Acts xvi. 23, 27, 36, Codex Bezae has *optio* as the rendering of *δεσμοφύλαξ*.

C. x. ποικίλα ὑποδήματα. The beautiful shoes appear also in the epitaph of Abercius.

spectamus, veni. Et tenuit mihi manum, et coepimus ire per aspera loca et flexuosa. Vix tandem pervenimus anhelantes ad amphitheatrum, et induxit me in media arena, et dixit mihi: Noli pavere, hic sum tecum, et conlaboro tecum, et abiit. Et adspicio populum ingentem attonitum. Et quia sciebam me ad bestias datam esse, mirabar quod non mitterentur mihi bestiae. Et exivit quidam contra me Aegyptius foedus specie cum adiutoribus suis pugnaturus mecum. Veniunt et ad me adolescentes decori adiutores et favitores mei. Et expoliata sum, et facta sum masculus. Et coeperunt me favitores mei oleo defricare¹, quomodo solent in agonem, et illum contra Aegyptium video in afa² volutantem. Et exivit vir quidam mirae magnitudinis, ut etiam excederet fastigium amphitheatri, discinctam³ habens tunicam et purpuram inter duos clavos per medium pectus, habens et caligulas⁴ multiformes ex auro et argento factas, et ferens⁵ virgam quasi lanista, et ramum viridem, in quo erant mala aurea. Et petiit silentium, et dixit: Hic Aegyptius si hanc vicerit, occidet illam gladio; et si hunc vicerit accipiet ramum istum. Et recessit. Et accessimus ad invicem, et coepimus mittere pugnos. Ille mihi pedes apprehendere volebat⁶, ego autem illi calcibus faciem caedebam. Et sublata sum in aere, et coepi eum sic caedere quasi terram concalcans. At ubi vidi moram fieri, iunxi manus, ita ut digitos in digitos mitterem. Et apprehendi illi caput, et cecidit in faciem; et calcavi illi caput. Et coepit populus clamare, et favitores mei psallere. Et accessi ad lanistam, et accepi ramum. Et osculatus est me, et dixit mihi: Filia pax tecum. Et coepi

¹ Sic S, Ed. defrigere.² C and S, aqua.³ H, discinctatus purpuram.⁴ S, galliculas.⁵ H, efferens.⁶ Sic, H. Ed. habet *quaerebat*.

*eis 'Ρώμην δς επεμψεν ἐμὲν βασίλῃαν ἀθρήσαι
καὶ βασίλισσαν ἰδεῖν χρυσόστολον χρυσοπέδιλον.*

Lightfoot (*Ign.* i. 482) explains this of the Church, basing it upon Ps. xlv. (liv.) 10 *παρέστη ἡ βασίλισσα ἐκ δεξιῶν σου ἐν ἱματισμῷ διαχρύσω περιβεβλημένη, πεποικιλμένη* where we may compare the last word with the *ποικίλα* of the Acts; and lower down *ποικίλα ἐκ χρυσοῦ καὶ ἀργυροῦ*. With this interpretation of Lightfoot, Ramsay also agrees. It is likely that more than one passage of Scripture has contributed to this curious idea of the Church in her beautiful slippers; for instance there is Cant. vii. 2 *τί ὠραιώθησαν διαβήματά σου ἐν ὑποδήμασιν, θύγατερ Ἀμναδάβ*; or Isaiah lii. 7 might be quoted.

Καὶ ἐκράτησεν τὰς χεῖράς μου καὶ ἐπορεύθημεν διὰ τραχέων καὶ σκολιῶν τόπων· καὶ μόλις παρεγενόμεθα εἰς τὸ ἀμφιθέατρον· καὶ εἰσέγαγέν με εἰς τὸ μέσον καὶ λέγει μοι· Μὴ φοβήθης· ἐνθαδε εἰμὶ μετὰ σοῦ, συγκαμνων σοι· καὶ ἀπήλθεν.

Καὶ ἰδοὺ βλέπω πλείστον ὄχλον ἀποβλέποντα τῇ θεωρείᾳ 5 σφόδρα· καὶ γὰρ ἦτις εἶδον πρὸς θηρία με καταδικασθεῖσαν ἐθαύμαζον ὅτι οὐκ ἔβαλλόν μοι αὐτά.

Καὶ ἦλθεν πρὸς με Αἰγύπτιος τις ἄμορφος τῷ σχήματι μετὰ τῶν ὑπουργούντων αὐτῷ μαχησόμενός μοι· καὶ ἔρχεται πρὸς με νεανίας τις εὐμορφώτατος τῷ κάλλει ἐξαστράπτων, καὶ ἕτεροι 10 μετ' αὐτοῦ νεανίαι ὡραῖοι· ὑπηρεταί τε σπουδασταὶ ἐμοί. καὶ ἐξεδύθην καὶ ἐγενήθην ἄρρην· καὶ ἤρξαντο οἱ ἀντιλήπτορές μου ἐλαίφ με ἀλείφειν, ὡς ἔθος ἐστὶν ἐν ἀγῶνι· καὶ ἀντικρυς βλέπω τὸν Αἰγύπτιον ἐκείνον ἐν τῷ κονιορτῷ κυλιόμενον.

Ἐξῆλθεν δέ τις ἀνὴρ θαυμαστοῦ μεγέθους, ὑπερέχων τοῦ 15 ἄκρου τοῦ ἀμφιθεάτρου, διεζωσμένος ἐσθῆτα ἣτις εἶχεν οὐ μόνον ἐκ τῶν δύο ὤμων τὴν πορφύραν, ἀλλὰ καὶ ἀνὰ μέσον ἐπὶ τοῦ στήθους· εἶχεν δὲ καὶ ὑποδήματα ποικίλα ἐκ χρυσοῦ καὶ ἀργυρίου· ἐβάσταζεν δὲ καὶ ῥάβδον ὡς βραβευτῆς ἢ προστάτης μονομάχων· ἔφερεν δὲ καὶ κλάδους χλωροὺς ἔχοντας μῆλα 20 χρυσᾶ· καὶ αἰτήσας σιγὴν γενέσθαι, ἔφη· Οὗτος ὁ Αἰγύπτιος ἐὰν ταύτην νικήσῃ ἀνελεῖ αὐτὴν μαχαίρα· αὕτη δὲ ἐὰν νικήσῃ αὐτὸν λήψεται τὸν κλάδον τούτον· καὶ ἀπέστη. προσήλθομεν δὲ ἀλλήλοις καὶ ἠρξάμεθα παγκρατιάζειν· ἐκείνος ἐμοῦ τοὺς πόδας κρατεῖν ἠβούλετο· ἐγὼ δὲ λακτίσμασιν τὴν ὄψιν αὐτοῦ 25 ἔτυπτον· καὶ ἰδοὺ *ἐπήρα ἀπὸ ἀέρος* καὶ ἠρξάμην αὐτὸν οὕτω τύπτειν ὡς μὴ πατοῦσα τὴν γῆν.

Ἰδοῦσα δὲ ὡς οὐδέπω ἤκισον αὐτὸν ζεύξασα τὰς χεῖράς μου καὶ δακτύλους δακτύλοις ἐμβαλοῦσα τῆς κεφαλῆς αὐτοῦ ἐπελαβόμην· καὶ ἔρριψα αὐτὸν ἐπ' ὄψει καὶ ἐπάτησα τὴν κεφαλὴν 30 αὐτοῦ· καὶ ἤρξατο πᾶς ὁ ὄχλος βοᾶν· καὶ οἱ σπουδασταὶ μου ἐγαυρίων· καὶ προσῆλθον τῷ βραβευτῇ καὶ ἔλαβον τὸν κλάδον· καὶ ἡσπάσατό με καὶ εἶπεν· Εἰρήνῃ μετὰ σοῦ, θύγατερ· καὶ

1. τραχειων. C. x., l. 4. συγκαμνων σου. 5. πιστόν. 6. καγῶ·
cod. kai. 12. αντιληπτορες. 14. κοιλιόμενον. 16. διεξοσμενος.
19. προστατων. 23. λειψεται. 26. forsitan επηρα αεριος.

Is this thought of the shoes the reason why Saturnus says in c. xii. πόδας δὲ αὐτοῦ οὐκ ἐθεασάμεθα?

ire cum gloria ad portam Sanavivariam. Et experrecta sum: et intellexi me non ad bestias, sed contra diabolum esse pugnaturam; sed sciebam mihi victoriam imminere¹. Hoc usque in pridie muneris egi: ipsius autem muneris actum, si quis voluerit, scribat.

XI. Sed et Satorus benedictus hanc visionem suam edidit, quam ipse conscripsit. Passi, inquit, eramus, et exivimus de carne, et coepimus ferri a quatuor Angelis in Orientem, quorum manus nos non tangebant. Ibamus autem non supini sursum versi, sed quasi mollem clivum² ascendentes. Et liberati primum³ iam mundo vidimus lucem immensam; et dixi: Perpetua (erat enim haec in latere meo), hoc est quod nobis Dominus promittebat: percepimus promissionem. Et dum gestamur ab ipsis quatuor Angelis, factum est nobis spatium grande, quod tale fuit quasi viridarium, arbores habens rosae⁴, et omne genus floris. Altitudo autem arborum erat in modum cypressi, quarum folia cadebant⁵ sine cessatione. Ibi autem in viridario, alii quatuor Angeli fuerunt clariores ceteris, qui ubi viderunt nos, honorem⁶ nobis dederunt, et dixerunt ceteris Angelis: Ecce⁷ sunt, ecce sunt: cum admiratione. Et expavescentes quatuor illi Angeli qui gestabant nos, deposuerunt nos: et pedibus nostris transivimus stadium via⁸ lata. Ibi invenimus Iocundum et Saturninum⁹ et Artaxium, qui eandem persecutionem passi vivi arserunt; et

¹ H, esse.

² C, glebam.

³ Ed., primam iam vidimus. H, primo mundo vidimus. C, primum iam mundo vidimus.

⁴ S, rosam.

⁵ S, ardebant.

⁶ S, et honorem.

⁷ S and C, ecce sunt. Expavescentes cum admiratione quatuor illi Angeli qui stabant deposuerunt nos.

⁸ H, violata.

⁹ In S and C deest Saturninum.

C. xi. κυπαρίσσου. Cf. *Passio Cypriani* p. 197, "iter autem nobis erat per locum prati amoenum et viridantium laeta fronde vestitum opacum cupressis consurgentibus in excelsum et pinnis pulsantibus caelum."

Ἦσαν δὲ μεθ' ἡμῶν κτέ.

The Latin text may be taken as more correct here, although at first sight the introduction of four new angels has little meaning. It is probable that these are the four Angels of the Presence (the Face-angels, cf. Is. lxiii. 9, who, by a natural misunderstanding, appear as four faces in the book of Enoch, where they are given as Michael, Rafael, Gabriel and Fanuel, *Enoch* c. 40). As to their being more glorious than the others, this is not a casual remark; we may compare it with 2 Pet. ii. 11 ὅπου ἄγγελοι ἰσχυροὶ καὶ δυνάμει μέζοντες ὄντες κτέ. This passage is the equivalent of Jude 9 where only one superior angel is spoken of (ὁ ἀρχάγγελος), viz. Michael. It thus appears that 2 Peter has substituted the Face-angels for

ἤρξαμεν εὐθὺς πορεύεσθαι μετὰ δόξης πρὸς πύλην τὴν λεγομένην
ζωτικὴν· καὶ ἐξυπνίσθην.

Καὶ ἐνόησα ὅτι οὐ πρὸς θηρία μοι ἀλλὰ πρὸς τὸν διάβολόν
ἐστιν ἡ ἐσομένη μάχη· καὶ συνῆκα ὅτι νικήσω αὐτόν.

Ταῦτα ἕως πρὸ μιᾶς τῶν φιλοτιμιῶν ἔγραψα· τὰ ἐν τῷ 5
ἀμφιθεάτρῳ γενησόμενα ὁ θέλων συγγραφάτω.

XI. Ἀλλὰ καὶ ὁ μακάριος Σάτυρος τὴν ἰδίαν ὀπτασίαν
αὐτὸς δι' ἑαυτοῦ συγγράψας ἐφανέρωσεν τοιαῦτα εἰρηκώς.

Ἦδη, φησὶν, ἤμεν ὡς πεπονθότες καὶ ἐκ τῆς σαρκὸς ἐξεληλύ-
θειμεν, καὶ ἠρξάμεθα βαστάζεσθαι ὑπὸ τεσσάρων ἀγγέλων πρὸς 10
ἀνατολάς, καὶ αἱ χεῖρες [αὐτῶν] ἡμῶν οὐχ ἥπτοντο· ἐπορευόμεθα
δὲ εἰς τὰ ἀνώτερα, καὶ οὐχ ὕπτιοι ἀλλ' οἷον ὡς δι' ὁμαλῆς
ἀναβάσεως ἐφερόμεθα.

Καὶ δὴ ἐξελθόντες τὸν πρῶτον κόσμον φῶς λαμπρότατον
εἶδομεν· καὶ εἶπον πρὸς τὴν Περπετούαν (πλησίον γάρ μου ἦν), 15
τοῦτό ἐστιν ὅπερ ὁ Κύριος ἡμῶν ἐπηγγείλατο· μετεilhάμεν
τῆς ἐπαγγελίας· αἰωρουμένων δὲ ἡμῶν διὰ τῶν τεσσάρων
ἀγγέλων ἐγένετο στάδιον μέγα, ὅπερ ὡσεὶ κῆπος ἦν, ἔχον ῥόδου
δένδρα καὶ πᾶν γένος τῶν ἀνθέων· τὸ δὲ ὕψος τῶν δένδρων ἦν
ὡσεὶ κυπαρίσσου μῆκος, ἀκαταπαύστως δὲ κατεφέρετο τὰ δένδρα 20
τὰ φύλλα αὐτῶν.

*Ἦσαν δὲ μεθ' ἡμῶν ἐν αὐτῷ τῷ κήπῳ οἱ τέσσαρες ἄγγελοι,
ἀλλήλων ἐνδοξότεροι, ὃν ἐφερόμεθα.* πτοουμένους δὲ ἡμᾶς
καὶ θαυμάζοντας [καὶ] ἀπέθηκαν, καὶ *ἀναλαβόντες τὴν ὁδὸν
διήλθομεν τὸ στάδιον τοῖς ἡμετέροις ποσίν. 25

Ἐκεῖ εὔρομεν Ἰουκοῦνδον καὶ Σάτυρον, καὶ Ἀρτάξιον τοὺς
ἐν αὐτῷ τῷ διωγμῷ ζῶντας κρεμασθέντας· εἶδομεν δὲ Κοῖντον

- | | | | |
|----------------------|------------------|------------------------------------|------------------------|
| 1. ἠρξωμεν. | 3. ενοησα. | 4. εσωμενη. | C. XI., l. 9. ἐξεληλυ- |
| θημεν. | 11. αυτων deest. | ουχιπτοντο (sic). | 17. εωρουμενων. |
| 20. κηπαρησου (sic). | ακαταπαστως. | 24. cod. και απεθηκαν και ανελαβον | |
- και οδον λαβοντες.

Michael, under the general term "the angels that are superior in strength and might." Appropriately then our Acts speak of the four great angels as excelling in glory.

ζῶντας κρεμασθέντας. At first sight it seems as if the Greek were here giving us something equivalent to *vivum cremari* as is not uncommon in writers who are of bilingual habit. Certainly the word ζῶντας would lead us to expect some such words as *κατακαυθέντας*, for burning alive was a common form of martyrdom. Cf. *Mart. Polyc. c. v. fin.: Mart. Petri Andreae &c.* (Ruinart p. 135) "tu igitur sacrificane turpiter te illusam vivam incendam." *Acta Tryphonis* (p. 138) "tales iussit imperator vivos incendi nisi sacrificaverint diis" etc. On the other hand observe

Quintum, qui et ipse martyr in carcere exierat; et quaerebamus de¹ illis ubi essent ceteri. Dixerunt autem nobis Angeli: Venite prius, introite, et salutate Dominum.

XII. Et venimus prope locum, cuius loci parietes tales erant, quasi de luce aedificati; et ante ostium loci illius quatuor Angeli stabant, qui introeuntes vestierunt stolas candidas. Et nos vestiti introivimus, et vidimus lucem immensam, et audivimus² vocem unitam dicentium: Agios, agios, agios; sine cessatione. Et vidimus in medio loci illius sedentem quasi hominem canum, niveos habentem capillos, et vultu iuvenili, cuius pedes non vidimus. Et in dextra, et in sinistra seniores³ quatuor et post illos ceteri seniores complures stabant: et introeuntes cum admiratione, stetimus ante thronum; et quatuor Angeli sublevaverunt nos: et osculati sumus illum, et de manu sua traiecit nobis in faciem⁴. Et ceteri seniores dixerunt nobis: Stemus. Et stetimus, et pacem fecimus. Et dixerunt nobis seniores: Ite, et ludite. Et dixi: Perpetua, habes quod vis. Et dixit mihi: Deo gratias, ut quomodo in carne hilaris fui, hilarior sum et hic modo.

XIII. Et exivimus, et vidimus ante fores Optatum episcopum ad dexteram, et Aspasium presbyterum doctorem ad sinistram, separatos et tristes, et miserunt se ad pedes nobis, et dixerunt nobis: Componite inter nos quia existis et sic nos relinquitis. Et diximus illis: Non⁵ tu es Papa noster, et tu Presbyter, ut⁶ quid vos ad pedes nostros mittatis? Et moti sumus et complexi illos sumus. Et coepit Perpetua graece⁷ cum illis loqui, et segregavimus eos in viridarium⁸ sub arbore rosae. Et dum loquimur cum eis, dixerunt illis Angeli: Sinite illos, refrigerent⁹; et si quas

¹ Sic H and C. S and Ed. habent ab.

² H, et introivimus et audivimus.

³ Seniores.....stetimus. Sic H, Ed. autem habet seniores viginti quatuor, et post illos ceteri complures stabant. Introivimus cum magna admiratione et stetimus.

⁴ Sic H, Ed. facie.

⁵ S, nonne.

⁶ H, ut vos ad pedes nobis mittatis. Et moti sumus. Ed. habet *misimus nos pro moti sumus*.

⁷ Sic S and C. In Ed. deest *graece*.

⁸ Sic H, Ed. viridario.

⁹ S and C, quiescite et refrigerate.

that there are at least two methods of hanging, one by the neck when life becomes almost immediately extinct: and one by the arms or by impalement; the latter requires the word 'living' to explain it fully. In the Martyrdoms of Lyons and Vienne Blandina was hanged in this way on a kind of cross, ἐπὶ ξύλου κρεμασθεῖσα προσέκειτο βορὰ τῶν προσβαλλομένων θηρίων.

τὸν μάρτυρα τὸν ἐν τῇ φυλακῇ ἀποθανόντα· ἐζητοῦμεν δὲ καὶ περὶ τῶν λοιπῶν τοῦ ἄρα εἰσὶν· καὶ εἶπον οἱ ἄγγελοι πρὸς ἡμᾶς· Δεῦτε πρῶτον ἔσω ἵνα ἀσπάσησθε τὸν Κύριον.

XII. Καὶ ἤλθομεν πλησίον τοῦ τόπου ἐκείνου τοῦ ἔχοντος τοίχους ὡσανεὶ ἐκ φωτὸς ὠκοδομημένους, καὶ πρὸ τῆς θύρας τοῦ 5 τόπου ἐκείνου εἰσελθόντες οἱ τέσσαρες ἄγγελοι ἐνέδυσαν ἡμᾶς λευκὰς στολὰς· καὶ εἰσήλθομεν καὶ ἠκούσαμεν φωνὴν ἡνωμένην λεγόντων· "Ἄγιος, ἅγιος, ἅγιος, ἀκαταπαύστως. καὶ εἶδομεν ἐν μέσῳ τοῦ τόπου ἐκείνου καθεζόμενον ὡς ἄνθρωπον πολίον· οὗ αἱ τρίχες ὅμοιαι χιόνος· καὶ νεαρόν τὸ πρόσωπον αὐτοῦ· 10 πόδας δὲ αὐτοῦ οὐκ ἔθεασάμεθα. πρεσβύτεροι δὲ τέσσαρες ἐκ δεξιῶν καὶ τέσσαρες ἐξ ἐκωνύμων ἦσαν αὐτοῦ· ὀπίσω δὲ τῶν τεσσάρων πολλοὶ πρεσβύτεροι.

Ὡς δὲ θαυμάζοντες εἰσεληλύθαμεν καὶ ἔστημεν ἐνώπιον τοῦ θρόνου, οἱ τέσσαρες ἄγγελοι ἐπῆραν ἡμᾶς, καὶ ἐφίλησαμεν αὐτόν, 15 καὶ τῇ χειρὶ περιέλαβεν τὰς ὀψεις ἡμῶν· οἱ δὲ λοιποὶ πρεσβύτεροι εἶπον πρὸς ἡμᾶς, Σταθῶμεν καὶ προσευξώμεθα. καὶ εἰρηνοποιήσαντες ἀπεστάλημεν ὑπὸ τῶν πρεσβυτέρων, λεγόντων, Πορεύεσθε καὶ χαίρεσθε.

Καὶ εἶπον, Περπετούα, ἔχεις ὃ ἐβούλουν. καὶ εἶπεν, Τῷ θεῷ 20 χάρις ἵνα, ὡς ἐν σαρκὶ μετὰ χαρᾶς ἐγενόμην, πλείονα χαρῷ νῦν.

XIII. Ἐξήλθομεν δὲ καὶ εἶδομεν πρὸ τῶν θυρῶν Ὀπτάτον τὸν ἐπίσκοπον καὶ Ἀσπάσιον τὸν πρεσβύτερον πρὸς τὰ ἀριστερὰ μέρη διακεχωρισμένους καὶ περιλύπους. καὶ πεσόντες πρὸς τοὺς πόδας ἡμῶν ἔφασαν ἡμῖν· Διαλλάξατε ἡμᾶς πρὸς 25 ἀλλήλους ὅτι ἐξεληλύθατε καὶ οὕτως ἡμᾶς ἀφήκατε. καὶ εἶπαμεν πρὸς αὐτούς, Οὐχὶ σὺ πάπας ἡμέτερος εἶ, καὶ σὺ πρεσβύτερος; ἵνα τί οὕτω προσεπέσατε τοῖς ἡμετέροις ποσίν; καὶ σπλαγχνισθέντες περιελάβομεν αὐτούς καὶ ἤρξατο ἡ Περπετούα Ἑλληνιστὶ μετ' αὐτῶν ὁμιλεῖν, καὶ ἀνεχωρήσαμεν 30 σὺν αὐτοῖς εἰς τὸν κήπον ὑπὸ τὸ δένδρον τοῦ ῥόδου. καὶ λαλούντων αὐτῶν μεθ' ἡμῶν ἀπεκρίθησαν οἱ ἄγγελοι πρὸς αὐτούς· Ἐάσατε αὐτοὺς ἀναψύξαι, καὶ εἴ τινας διχοστασίας

C. XII. Cf. *Ep. ad Diognet.* xi. 4, οὗτος ὁ ἀπ' ἀρχῆς, ὁ καινὸς φανεῖς καὶ παλαιὸς εἰρεθεῖς.

C. XIII. Cf. *Hermas, Vis.* III. 1. 9, ὁ εἰς τὰ δεξιὰ μέρη τόπος ἄλλων ἐστίν, τῶν ἥδη εὐαρεστηκόντων τῷ Θεῷ καὶ παθόντων ἐν ἑκκα τοῦ ὀνόματος.

The Latin translator, not understanding the force of the allusion to the left-hand, adds words of explanation: Optatus was on the right-hand and Aspasius on the left.

habetis inter vos dissensiones, dimittite vobis invicem. Et conturbaverunt eos. Et dixerunt Optato: Corrige plebem tuam; quia sic ad te conveniunt quasi de circo redeuntes, et de factionibus¹ certantes. Et sic nobis visum est quasi vellent claudere portas. Et coepimus illic multos fratres cognoscere², sed et martyres. Universi odore inenarrabili alebamur, qui nos satiabat. Tunc gaudens experrectus sum.

XIV. Hae visiones insigniores ipsorum martyrum beatissimorum Saturi et Perpetuae, quas ipsi conscripserunt. Secundulum vero Deus maturiore exitu de saeculo, adhuc in carcere evocavit, non sine gratia, ut bestias lucraretur. Gladium³ tamen etsi non anima, certe caro eius agnovit.

XV. Circa Felicitatem vero, (nam et illi gratia Domini eiusmodi contigit) cum octo iam mensium suum ventrem haberet, (nam praegnans fuerat apprehensa:) instante spectacula die, in magno erat luctu⁴, ne propter ventrem differretur; quia non licet praegnantibus poenae repraesentari: et ne inter alios⁵ postea sceleratus, sanctum et innocentem sanguinem funderet. Sed et commartyres eius graviter contristabantur, ne tam bonam sociam, quasi comitem, solam in via eiusdem spei relinquerent. Coniuncto itaque unito gemitu, ad Dominum orationem fuderunt ante tertium diem muneris. Statim post orationem dolores eam

¹ H, de fatigationibus.

² C, cognoscere Martyres, ubi odore.

³ Sic H, Ed. gaudium.

- ⁴ S, luctae.

⁵ Sic H, Ed. aliquos.

ἀλλάγε καὶ τοὺς μάρτυρας. This is the passage referred to by Tertullian in *de Anima* 55, "Quomodo Perpetua fortissima martyr, sub die passionis, in revelatione paradisi, solos illic commartyres suos vidit, nisi quia nullis romphaea paradisi janitrix cedit, nisi quia in Christo decesserint, non in Adam?" From this passage we have inferred that Tertullian knew the Acts in their complete form, i.e. Perpetua's vision + Saturus', since he cites as a vision of Perpetua what is really a part of the vision of Saturus. The reasoning is not wholly convincing, because in the vision of Saturus, Perpetua is imagined to be present, and to see what he sees. We observe that Tertullian here brings forward the undoubtedly Montanistic belief that Paradise is reserved for those who have suffered for the Name. Upon which Cardinal Orsi remarks, in the desire to repel the allegation of Montanism from the martyrs; "sed aut fallitur aperte Tertullianus aut fallit: solos enim se in Paradiso vidisse martyres Perpetua non dicit: quin oppositum clare et aperte testatur: 'et coepimus illic multos fratres cognoscere sed et martyres.' Igitur non solos ibi commartyres sed et confratres etiam eosque non paucos Perpetua seu potius Saturus vidit." There is some force in Cardinal Orsi's objection; nevertheless it is pretty certain that the passage especially in the Greek does contain an emphasis on the martyrs; the usage of ἀλλάγε καὶ seems to be late and not to differ

ἔχετε μεθ' ἑαυτῶν, ἄφετε ὑμεῖς ἀλλήλοις· καὶ ἐπέπληξαν αὐτοὺς καὶ εἶπαν Ὁπτάτῳ· Ἐπανόρθωσαι τὸ πλήθος σου, οὕτω γὰρ συνέρχονται πρὸς σε, ὥσει ἀπὸ ἵπποδρομιῶν ἐπανερχόμενοι καὶ περὶ αὐτῶν φιλονεικοῦντες. ἐνομίζομεν δὲ αὐτοὺς ὡς θέλαιν ἀποκλείσαι τὰς πύλας. καὶ ἠρξάμεθα ἐκεῖ πολλοὺς τῶν 5 ἀδελφῶν ἐπιγινώσκειν, ἀλλάγε καὶ τοὺς μάρτυρας· ἐτρεφόμεθα δὲ πάντες ὁσμῇ ἀνεκδιηγῆτῳ ἣτις οὐκ ἐχόρταζεν ἡμᾶς· καὶ εὐθέως χαίρων ἐξυπνίσθην.

XIV. Αὗται αἱ ὁράσεις ἐμφανέσταισι τῶν μαρτύρων Σατύρου καὶ Περπετούας ἃς αὐτοὶ συνεγράψαντο· τὸν γὰρ Σεκοῦνδον 10 τάχειον ἐκ τοῦ κόσμου μετεπέμψατο [ὁ θεός]· ἐν γὰρ τῇ φυλακῇ τῆς κλήσεως ἡξιώθη σὺν τῇ χάριτι πάντως κερδάνας τὸ μὴ Luke ii. 35. θηριομαχῆσαι· πλὴν εἰ καὶ μὴ τὴν σάρκα ἀλλοῦνγε τὴν ψυχὴν αὐτοῦ διεξῆλθεν τὸ ξίφος.

XV. Ἀλλὰ καὶ τῇ Φηλικητάτῃ ἡ χάρις τοῦ θεοῦ τοιαύτη 15 ἐδόθη. ἐκείνη γὰρ συλληφθεῖσα ὁκτῶ μηνῶν ἔχουσα γαστέρα, πανυωδύρετο (διότι οὐκ ἔξεστιν ἐγκύμονα θηριομαχεῖν ἢ τιμωρεῖσθαι), μήπως ὕστερον μετὰ ἄλλων ἀνοσίων ἐκχυθῇ τὸ αἷμα αὐτῆς τὸ ἀθῶον.

Ἀλλὰ καὶ οἱ συμμάρτυρες αὐτῆς περίλυποι ἦσαν σφόδρα 20 οὕτω καλὴν συνεργὸν καὶ ἄσει συνοδοιπόρον ἐν ὁδῷ τῆς αὐτῆς ἐλπίδος μὴ θέλοντες καταλείπειν. πρὸ τρίτης οὖν ἡμέρας τοῦ πάθους αὐτῶν κοινῷ στεναγμῷ ἐνωθέντες προσευχὴν πρὸς τὸν Κύριον ἐποίησαντο· καὶ εὐθὺς μετὰ τὴν προσευχὴν ὠδῖνες

C. xiv., l. 11. ο θεος deest. 13. σαρκα· cod. ψυχην. ψυχην· cod. σαρκα.
C. xv., l. 17. πανοδυρετο.

essentially from τοὺς μάρτυράς γε, i.e. 'the martyrs were there, if none others.' In that case Tertullian has made the suggestion a little more definite. Or we may conjecture that the primitive Greek text to which Tertullian is referring read ἀλλάγε καὶ τούτους μάρτυρας, which scarcely differs from our edited text.

But it is conceivable that, after all, Tertullian is referring to the earlier part of the vision where Iucundus, and Artaxius are seen beyond the plain. Perhaps this last group of nameless brethren are not in Paradise at all; Aspasius and Optatus at all events are still alive.

In Perpetua's own vision in c. iv. the white-robed throng correspond to the company in the Apocalypse who have come up out of the great tribulation. They are therefore martyrs.

C. xiv. εἰ καὶ μὴ τὴν σάρκα. The scribe supposing that Secundus was killed in the prison, assumes of course that the sword did pierce his flesh, and not his soul: thus the obvious allusion to the Gospel of Luke is weakened; and the sentence deprived of its meaning. We have restored the order against the ms.

invaserunt. Et cum, pro naturali difficultate octavi mensis, in partu laborans doloret, ait illi quidam ex ministris cataractariorum: Quae sic modo doles, quid facies objecta bestiis, quas contempsisti cum sacrificare noluisti? Et illa respondit: *Modo ego patior quod patior, illic autem alius erit in me qui patietur pro me, quia et ego pro illo passura sum.* Ita enixa est puellam, quam sibi quaedam soror in filiam educavit.

XVI. Quoniam ergo permisit, et permittendo voluit Spiritus sanctus ordinem ipsius muneris conscribi, etsi indigni ad supplementum tantae gloriae describendum, tamen quasi mandatum sanctissimae Perpetuae, immo fidei commissum eius exsequimur, unum adicientes documentum de ipsius constantia et animi sublimitate. Cum¹ a tribuno castigatus eo tractarentur; quia ex admonitionibus hominum vanissimorum verebatur, ne subtraherentur de carcere incantationibus aliquibus magicis; in faciem respondit Perpetua, et dixit: Quid utique non permittis refrigerare noxiis nobilissimis, Caesaris scilicet, et natali² eiusdem pugnaturis? Aut non tua gloria est, si pinguioribus illo producatur? Horruit et erubuit tribunus; et ita iussit illos humanius haberi, ut fratribus eius et ceteris facultas fieret introeundi, et refrigerandi cum eis; iam et³ ipso Optione carceris credente.

XVII. Pridie quoque cum illa coena ultima, quam liberam vocant, quantum in ipsis erat non coenam liberam, sed agapen coenarent, eadem constantia ad populum verba ista iactabant, comminantes iudicium Domini, contestantes passioni suae felicitatem, inridentes⁴ concurrentium curiositatem, dicente Saturo: Crastinus dies satis vobis non est, quod libenter videtis quod odistis, hodie amici, cras inimici. Notate tamen nobis⁵ facies

¹ S and C, quia tribuno castigante eos et male tractante, quoniam ex admonitionibus.

² S and C, quia natali eius sumus pugnaturi.

³ H, tamen.

⁴ H, irritantes.

⁵ S, vobis.

C. xv. ἐκεῖ δὲ ἄλλος. Cf. *Acta S. Victoris* (Ruinart p. 260), "Ego sum, inquit, Jesus qui in sanctis meis iniurias et tormenta sustineo."

C. xvi. This seems to be imitated in *Acta S. Montani* (Ruinart p. 204), "Haec omnes de carcere simul scripserant. Sed quia necesse erat omnem actum martyrum beatorum pleno sermone complecti; quia et ipsi de se per modestiam minus dixerant: et Flavianus quoque privatim hoc nobis munus iniunxit ut quicquid litteris eorum deesset, adderemus etc."

C. xvii. The 'last supper' of the criminals is referred to by Tertullian, *Apol.* 42, "Non in publico Liberalibus discumbo, quod bestiariis supremam

αὐτὴν συνέσχον, κατὰ τὴν τοῦ ὀγδόου μηνὸς φύσιν χαλεπαί.
καὶ μετὰ τοῦ τοκετοῦ καμοῦσα ἤλγει. ἔφη δέ τις αὐτῇ τῶν
παρατηρούντων ὑπηρετῶν· Εἰ νῦν οὕτως ἀλγείς τί ἔχεις
ποιῆσαι, βληθεῖσα πρὸς θηρία ὧν κατεφρόνησας ὅτε ἐπιθύειν
κατεφρόνησας καὶ οὐκ ἠθέλησας θῦσαι; κἀκεῖνη ἀπεκρίθη· 5
Νῦν ἐγὼ πάσχω ὃ πάσχω· ἐκεῖ δὲ ἄλλος ἐστὶν ὁ πάσχων ὑπὲρ
ἐμοῦ· ἔσται ἐν ἐμοὶ ἵνα πάθῃ διότι ἐγὼ πάσχω ὑπὲρ αὐτοῦ.

Ἔτεκεν δὲ κοράσιον ὃ μῖα τῶν ἀδελφῶν συλλαβοῦσα εἰς
θυγατέρα ἀνέθρεψεν αὐτῇ.

XVI. Ἡμῖν δὲ ἀναξίοις οὖσιν ἐπέτρεψεν τὸ ἅγιον πνεῦμα 10
ἀναγράψαι τὴν τάξιν τὴν ἐπὶ ταῖς φιλοτιμίαις παρακολουθή-
σασαν· πλὴν ὡς ἐντάλματι τῆς μακαρίας Περπετούας μᾶλλον
δὲ ὡς κελεύσματι ὑπηρετοῦντες ἀναπληροῦμεν τὸ προσταχθὲν
ἡμῖν. Ὡς δὲ πλείους ἡμέραι διεγίνοντο ἐν τῇ φυλακῇ ὄντων
αὐτῶν, ἡ μεγαλόφρων καὶ ἀνδρεία ὡς ἀληθῶς Περπετούα, τοῦ 15
χιλιάρχου ἀπεινέστερον αὐτοῖς προσφερομένου, τινῶν πρὸς
αὐτὸν ματαιῶς διαβεβαιωσαμένων τὸ δεῖν φοβεῖσθαι μήπως
ἐπ' ὧδαῖς μαγικαῖς τῆς φυλακῆς ὑπεξέλθωσιν, ἐνώπιον ἀπεκρίθη
λέγουσα· Διατί ἡμῖν ἀναλαμβάνειν οὐκ ἐπιτρέπεις ὀνομαστοῖς
καταδίκοις Καίσαρος γενεθλίοις ἀναλωθησομένοις; μὴ γὰρ οὐχὶ 20
σὴ δόξα ἐστίν, ἐφ' ὅσον πίνοντες προσερχόμεθα; πρὸς ταῦτα
ἔφριξε καὶ ἐδυσωπήθη ὁ χιλιάρχος, ἐκέλευσέν τε αὐτοὺς φιλαν-
θρωπότερον διάγειν, ὡς καὶ τὸν ἀδελφὸν αὐτῆς καὶ λοιποὺς τινὰς
δεδυνῆσθαι εἰσελθεῖν καὶ ἀναλαμβάνειν μετ' αὐτῶν. τότε καὶ
αὐτὸς ὁ τῆς φυλακῆς προεστὼς ἐπίστευσεν. 25

XVII. Ἀλλὰ καὶ πρὸ μιᾶς ὅτε τὸ ἔσχατον ἐκεῖνο δεῖπνον
ὑπὲρ ἐλεύθερον ὀνομάζουσιν· ὅσον δὲ ἐφ' ἑαυτοῖς οὐκ ἐλεύθερον
δεῖπνον ἀλλ' ἀγάπην ἐπεκάλουν τῇ αὐτῶν παρρησίᾳ· πρὸς δὲ
τὸν ὄχλον τὸν ἐκέισε παρεστῶτα ῥήματα ἐξέπεμπον μετὰ
πολλῆς παρρησίας αὐτοῖς ἀπειλοῦντες κρίσιν Θεοῦ, ἀνθομο- 30
λογούμενοι τὸν μακαρισμὸν τοῦ πάθους ἑαυτῶν, καταγελῶντες
τὴν περιεργίαν τῶν συντρεχόντων, Σατύρου λέγοντος· Ὁ αὔριον
ἡμέρα ὑμῖν οὐκ ἐπαρκεῖ; τί ἡδέως ὀράτε οὓς μισεῖτε· σήμερον
φίλοι· αὔριον ἐχθροί; πλὴν ἐπισημειώσασθε τὰ πρόσωπα ἡμῶν
ἐπιμελῶς ἵνα καὶ ἐπιγινῶτε ἡμᾶς ἐν ἐκείνῃ τῇ ἡμέρᾳ. 35

1. Cod. φνσι. 2. τον τοκετον. C. xvi., l. 15. ei μεγαλοφρον.
21. cod. πλειονες. C. xvii., l. 32. λεγοντος· cod. λεωντος. 33. υμιν·
cod. ημιν. μισειτε. cod. μασηται.

coenantibus mos est." It appears then that the free supper was originally a
supper in honour of Bacchus.

nostras diligenter, ut recognoscatis nos in die illo iudicii. Ita omnes¹ inde attoniti discedebant: ex quibus multi crediderunt.

XVIII. Inluxit dies victoriae illorum, et processerunt de carcere in amphitheatrum, quasi in caelum, hilares, vultu decori; si forte, gaudio paventes non timore. Sequebatur Perpetua placido vultu², et pedum incessu, ut matrona Christi Dei dilecta: vigore oculorum deiciens omnium conspectum. Item Felicitas salvam se peperisse gaudens ut ad bestias pugnaret, a sanguine, ab obstetrice ad retiarium, lotura post partum baptismo secundo. Et cum delati³ essent in portam, et cogerentur habitum induere; viri quidem sacerdotum Saturni, feminae vero sacratarum Cereri; generosa illa in finem usque constantia repugnavit. Dicebant enim: Ideo ad hoc sponte pervenimus, ne libertas nostra abduceretur. Ideo animas nostras addiximus, ne tale aliquid faceremus: hoc vobiscum pacti sumus. Agnovit iniustitia iustitiam: concessit tribunus, ut quomodo erant, simpliciter inducerentur. Perpetua psallebat, caput iam Aegyptii calcans. Revocatus et Saturninus et Saturus populo spectanti comminabantur de hoc. Ut sub conspectu Hilariani pervenerunt, gestu et nutu coeperunt

¹ S, multi.

² H, lucido vultu ut matrona Christi, ut Dei delicata, vigore oculorum deiciens omnium conspectum. Ed., placido vultu, et pedum incessu, ut matrona Christi Dei dilecta: vigorem oculorum suorum deiciens ab omnium conspectu.

³ H, ducti.

C. XVIII. ἐπέλαμψεν. Imitated in *Passio Cypriani* p. 186, "illuxit denique dies alius, ille signatus, ille promissus ille divinus...dies de conscientia futuri martyris laetus."

ὥς εἰς οὐρανόν. Imitated in *Acta Montani*, "ad summum ascendebamus locum poenarum quasi ascenderemus in caelum."

ὥς ματρώνα Χριστοῦ. So Blandina is described in the Lyons martyrdoms: ὥς εἰς νυμφικὸν δέιπνον κεκλημένη ἀλλὰ μὴ πρὸς θηρία βεβλημένη. Cf. *Tert. ad uxor.* i. 4, "Sorores nostrae...malunt Deo nubere."

ἡναγκάζοντο κτέ. From Tertullian, *De Testim. Animae* 2, we find that the men would have been dressed in scarlet cloaks, while the women would have worn a fillet round their heads. "Unde hoc tibi non Christianae? atque id plerumque et vitta Cereris redimita, et pallio Saturni coccinata." Cf. also *De Pallio* 4. It was apparently not an uncommon thing to make the Christian convict represent some mythological character or to engage in some idolatrous ceremony. Thus Clement in his epistle speaks of Christian women who played the part of the Danaids or of Dirce in the arena. In the Acts of Theodotus (Ruinart p. 301) we have a case of persons who were made priests of Diana and Minerva: "iussit eas fieri Dianae et Minervae sacerdotes ut quotannis iuxta morem lavarent earum simulacra in vicino laeu."

In our Acts the allusion to priests of Kronos and priestesses of Demeter is

Οὕτως ἅπαντες ἐκείθεν ἐκπληττόμενοι ἐχωρίζοντο, ἐξ ὧν πλείστοι ἐπίστευσαν.

XVIII. Ἐπέλαμψε δὲ ἡ ἡμέρα τῆς νίκης αὐτῶν· καὶ προῆλθον ἐκ τῆς φυλακῆς εἰς τὸ ἀμφιθέατρον ὡς εἰς οὐρανὸν ἀπιόντες, ἱλαροὶ καὶ φαιδροὶ τῷ προσώπῳ, πτοοῦμενοι εἰ τύχοι 5 χαρᾷ μᾶλλον ἢ φόβῳ.

Ἠκολούθη δὲ ἡ Περπετοῦα πρῶως βαδίζουσα, ὡς ματρῶνα Χριστοῦ, ἐγρηγόρῃ ὀφθαλμῷ, καὶ τῇ προσόψει καταβάλλουσα τὰς πάντων ὁράσεις.

Ὅμοιως καὶ ἡ Φηλικητάτη χαίρουσα ἐπὶ τῇ τοῦ τοκετοῦ 10 ὑγείᾳ ἵνα θηριομαχήσῃ, ἀπὸ αἵματος εἰς αἷμα, ἀπὸ μαίας πρὸς μονομαχίαν, μέλλουσα λούσασθαι μετὰ τὸν τοκετόν, βαπτισμῷ δὲ ὑστέρῳ τουτέστι τῷ ἰδίῳ αἵματι.

Ὅτε δὲ ἤγγισαν πρὸ τοῦ ἀμφιθεάτρου, ἠναγκάζοντο ἐνδύσασθαι σχήματα, οἱ μὲν ἄρρενες ἱερέων Κρόνου, αἱ δὲ θηλεῖαι 15 τῆς Δημήτρας· ἀλλ' ἡ εὐγενεστάτη ἐκείνη Περπετοῦα παρρησίᾳ ἠγωνίσαστο ἕως τέλους· ἔλεγεν γάρ· Διὰ τοῦτο ἐκουσίως εἰς τοῦτο ἐληλύθαμεν· ἵνα ἡ ἐλευθερία ἡμῶν μὴ ἡττηθῇ· διὰ τοῦτο τὴν ψυχὴν ἡμῶν παρεδώκαμεν ἵνα μηδὲν τῶν τοιούτων πράξωμεν· τοῦτο συνεταξάμεθα μεθ' ὑμῶν. 20

Ἐπέγνω ἡ ἀδικία τὴν δικαιοσύνην· καὶ μετέπειτα ἐπέτρεψεν ὁ χιλιάρχος ἵνα οὕτως εἰσαχθῶσιν ὡς ἦσαν· καὶ ἡ Περπετοῦα ἔψαλλεν, τὴν κεφαλὴν τοῦ Αἰγυπτίου ἤδη πατοῦσα.

Ῥεουκάτος δὲ καὶ Σατουρνῖνος καὶ Σάτυρος τῷ θεωροῦντι ὁχλῷ προσωμίλουν· καὶ γενόμενοι ἔμπροσθεν Ἰλαριάνου, κινή- 25

C. XVIII., l. 5. ἡ τυχοί. 20. cod. τουτο συνεταξωμεθα μεθασυνεταξεσθαι μεθ' ὡμων (sic). 24. Σατουρνιλος. 25. προσομηλουν: (Lat. προσηπειλουν).

thoroughly in harmony with the evidence supplied by North African inscriptions. The cultus was one which not only was appropriate to the older rural life, and to the Punic settlers who inherited Phenician forms of idolatry, but in the great wheat raising districts would hold its own against any pressure of recently imported religions. Thus we find *C. I. L. VIII. 2266, FRUGIFERO SATURNO AUG. SAC. TI. TELTONIUS MARCELLUS PRAEFEC. LEG. III. AUG. P. V. V.S.L.A. and 4581, DEO FRUGUM. SATURNO FRUGIFERO &c.*

The African references to the priesthood attached to the worship of Saturn and Ceres are numerous. Nine inscriptions commemorate priests of Ceres, and of these seven are women: over thirty inscriptions record the names of priests of Saturn. No other form of African worship is so well represented by memorials of its officials as these are. The whole number of Ceres-inscriptions is about twenty, of Saturn one hundred and five. Not even Jupiter is so frequent as this last. It may be said, therefore, that the allusion made in the Acts to the worship of Saturn and Ceres is in harmony with the evidence of inscriptions which makes them to be amongst the most popular of African deities. Temples of Ceres are

Hilariano dicere: Tu nos, inquit, te autem Deus iudicabit. Ad hoc populus exasperatus, flagellis eos vexari pro ordine venatorum postulavit. Et utique illi gratulati, quod aliquid et de dominicis passionibus essent consecuti.

XIX. Sed qui dixerat, Petite et accipietis, petentibus dedit eum exitum, quem quisque desideraverat. Nam si quando inter se de martyrii sui voto sermocinabantur, Saturninus quidem omnibus bestiis velle se obici profitebatur: ut scilicet gloriosiores gestaret coronam. Itaque in commissione spectaculi, ipse et Revocatus leopardum experti, etiam super pulpitum ab urso vexati sunt. Satorus autem nihil magis quam ursum abominabatur: sed uno morsu leopardi confici se iam praesumebat. Itaque cum aper subministraretur, venator potius qui illum apro subministraverat¹, subfossus ab eadem bestia, post dies muneris obiit. Satorus solummodo tractus est. Et cum ad ursum substrictus esset in ponte, ursus de cavea prodire noluit. Itaque secundo Satorus inlaesus revocatur.

XX. Puellis autem ferocissimam vaccam, ideoque praeter consuetudinem comparatam², diabolus praeparavit: sexui earum etiam de bestia aemulatus. Itaque despoliatæ et reticulis indutæ³ producebantur. Horruit populus, alteram respiciens puellam delicatam, alteram a partu recenti stillantibus mammis. Ita revocatæ⁴ et discinctis indutæ. Inducitur prior Perpetua; iactata est, et

¹ H, apro subligaverat. Ed., aprum subministraverat.

² H, paratam.

³ S and C, dispoliatæ promovebantur.

⁴ Ed., revocatæ discinguntur.

noted by the inscriptions at Agbia in Proconsular Africa and at Theveste in Numidia; at Sitifis in Mauretania have been found inscriptions in honor both of Saturn and Ceres. Cf. *C. I. L.* viii. 8442—8450.

But beyond the fact that the worship of Ceres and of Saturn was popular in Africa, there was a special reason for attempting to dress them this way. We have shewn on p. 5, that the dedicated priestesses of Ceres were women who had left their husbands; and the populace would not be slow in seeing the appropriateness of the raiment to the case. Still more fun would be made of the men; for as priests of Saturn, who devoured children, they would furnish an excellent reminder of the scandals which prevailed as to the Thyestean banquets of the Christians, and their custom of eating in secret "the flesh of the Son of man and drinking his blood"; we may be sure that when the scarlet robes of the priests of Saturn appeared in the arena a shout of delight would have passed round the benches where the expectant Carthaginian populace were seated.

To modern Christians these allusions are valuable because they shew us an historical nucleus of the shameful blood-scandals against the Jews, and because they are in evidence for the early diffusion of the language of the fourth

μασιν καὶ νεύμασιν ἔφασαν· Σὺ ἡμᾶς καὶ σὲ ὁ θεός. πρὸς ταῦτα ἀγριωθεὶς ὁ ὄχλος μαστιγωθῆναι αὐτοὺς ἐβόησεν· ἀλλὰ οἱ ἅγιοι ἠγαλλιόσθησαν ὅτι ὑπέμεινάν τι καὶ τῶν κυριακῶν παθῶν.

XIX. Ἀλλ' ὁ εἰπὼν· Αἰτέισθε καὶ λήψεσθε, ἔδωκεν τοῖς 5 αἰτήσασιν ταύτην τὴν δόξαν οἷαν ἕκαστος αὐτῶν ἐπεθύμησεν. εἶποτε γὰρ μεθ' ἑαυτῶν περὶ τῆς εὐχῆς τοῦ μαρτυρίου συνελάλουν, Σατουρνίνος μὲν πᾶσιν τοῖς θηρίοις βληθῆναι ἑαυτὸν ἔθελεν πάντως ἵνα ἐνδοξότερον στέφανον ἀπολάβῃ. ἐν ἀρχῇ γοῦν τῆς θεωρίας αὐτὸς μετὰ Ῥεουκάτου πάρδαλιν ὑπέμεινεν· 10 ἀλλὰ καὶ ὕστερον ἐπὶ τῆς γεφύρας ὑπὸ ἄρκου διεσπαράχθη. Σάτυρος δὲ οὐδὲν ἄλλο ἢ ἄρκον ἀπεστρέφετο· καὶ ἐνὶ δῆγματι παρδάλεως τελειοῦσθαι αὐτὸν ἐπεπόθει· ὥστε καὶ τῷ συὶ *διακονούμενος* ἐσύρη μόνον, σχοινίῳ προσδεθείς· ὁ δὲ θηρατῆς ὁ τῷ συὶ αὐτὸν προσβαλὼν ὑπὸ θηρὸς κατετρώθη οὕτως ὡς 15 μεθ' ἡμέραν τῶν φιλοτιμιῶν ἀποθανεῖν. ἀλλὰ καὶ πρὸς ἄρκον διαδεθείς ὑγῆς πάλιν διέμεινεν· ἐκ γὰρ τοῦ ζωγρίου αὐτῆς ἡ ἄρκος οὐκ ἐθέλησεν ἐξελθεῖν.

XX. Ταῖς μακαρίαις δὲ νεάνισιν ἀγριωτάτην δάμαλιν ἡτοίμασεν ὁ διάβολος, τὸ θῆλυ αὐτῶν παραξηλὼν διὰ τοῦ 20 θηρίου· καὶ γυμνωθεῖσαι γοῦν προσήγοντο· ὅθεν ἀπεστράφη ὁ ὄχλος, μίαν μὲν τρυφερὰν κόρην βλέπων, τὴν δὲ ἄλλην μασθοὺς στάζουσαν γάλα, ὡς προσφάτως κηύσασαν· καὶ ἀναληφθεῖσαι πάλιν, καὶ δικτύους περιβληθεῖσαι, ἐνδιδύσκονται ὑποζώσασιν· ὅθεν εἰσελθουσῶν αὐτῶν, ἡ Περπετούα πρώτη κερατισθεῖσα 25

C. XIX., 1. 8. Σατουρνίλος. 9. θελεῖν. 13. ἐπεποθῇ. 17. διεμεινον.
C. XX., 22. μασθοῖς.

gospel; they furnish us, therefore, with materials upon which to base acts of repentance and of faith.

C. XIX. διακονούμενος: is this for δεικνύμενος?

σχοινίῳ προσδεθείς. The martyr was attached by a rope to the wild beast, before it was loosed from its den, in order that he might not escape. This explains why in some of the more famous martyrdoms the saints have pulled the beasts towards them: for example in the letter of the Smyrnaeans on the death of Polycarp, we are told that Germanicus ἑαυτῷ τὸ θῆριον ἐπεσπάσατο προσβιασάμενος. And in Euseb. H. E. VIII. 7 the martyrs are said to do the very same thing, τῶν ἱερῶν ἀθλητῶν γυμνῶν ἐσώτων καὶ ταῖς χερσὶ κατασειόντων ἐπὶ τε σφᾶς αὐτοὺς ἐπισπωμένων. Lightfoot quotes these passages in illustration of Ign. ad Rom. v. 5 (προσβιάσσομαι) but does not notice that the force is applied by means of a rope.

C. XX. δικτύους περιβληθεῖσα. The whole incident recalls the martyrdom of Blandina τοῦσχατον εἰς γυργαθὸν βληθεῖσα, ταύρῳ παρεβλήθη.

concidit in lumbos. Et ut conspexit¹ tunicam a latere discissam, ad velamentum femorum adduxit, pudoris potius memor, quam doloris. Dehinc requisita, et dispersos capillos infibulavit. Non enim decebat Martyrem dispersis capillis pati, ne in sua gloria plangere videretur. Ita surrexit, et elisam Felicitatem cum vidisset, accessit, et manum ei tradidit et sublevavit illam. Et ambae pariter steterunt, et populi duritia devicta revocatae sunt in portam Sanavivariam. Illic Perpetua a quodam tunc catechumino, Rustico nomine, qui ei adhaerebat, suscepta, et quasi a somno expergita (adeo in Spiritu et in ecstasi fuerat) circumspicere coepit, et stupentibus omnibus ait: Quando, inquit, producimur ad vaccam illam nescio quam²? Et cum audisset quod iam evenerat, non prius credidit, nisi quasdam notas vexationis in corpore et habitu suo recognovisset³. Exinde accersitum fratrem suum, et illum catechuminum allocuta est eos, dicens; In fide state, et invicem omnes diligite; et passionibus nostris ne scandalizemini.

XXI. Item Saturus in alia porta militem Pudentem⁴ exhortabatur dicens ad summum⁵; sicut promisi et praedixi, nullam usque adhuc bestiam sensi. Et nunc de toto corde credas. Ecce prodeo illo, et ab uno morsu leopardi consumar. Et statim in fine spectaculi, leopardo obiectus de uno morsu eius tanto perfusus est sanguine, ut populus revertenti illi secundi baptismatis testimonium reclamaverit: Salvum lotum, salvum lotum. Plane

¹ H, ubi sedit.

² Sic S and C, in Ed. deest *quam*.

³ Ed. addit *et illum catechuminum*.

⁴ In H deest *Pudentem*.

⁵ Sic H, Ed. habet *adsum certe*.

της δὲ σκληρότητος. Cf. *Passio Cypriani* p. 196, "victa denique feritate tormentum."

C. xxi. ἐνεπλήσθη. Cf. Dion Cass. LXXVII. 2 καὶ γὰρ τοῦ αἵματος πᾶσα ἐπλήσθη, where Geta is massacred in his mother's arms.

καλῶς ἐλούσω. Aubé remarks that it is quite possible that no one except the author of the Acts saw an allusion to Christian baptism (much less to the Montanistic idea of martyrdom as a second baptism), in the cry of the populace. And he refers to an inscription at Brescia to shew that the expression is simply a bath-motto. In this inscription (*C. I. L.* v. 4500) the mosaic of an ancient bath pavement furnishes us with the following formulae proper to the occasion;

BENE

SALVV

PERIPSV

LAVA

LOTVM

MA SV

or 'bene lava,' 'salvum lotum,' 'peripsema sume.' The second of these is the formula in our Acts; its proper Greek equivalent is 'καλῶς ἐλούσω,' and it is addressed to a person when leaving the bath. The *Corpus Inscriptionum* shews

ἔπεσεν ἐπ' ὁσφύος· καὶ ἀνακαθίσασα τὸν χιτῶνα ἐκ τῆς πλευρᾶς αὐτῆς συναγαγούσα, ἐσκέπασεν τὸν ἑαυτῆς μηρόν, αἰδοῦς μᾶλλον μνημονεύσασα ἢ πόνων· [αἰδουμένη·] μηδαμῶς φροντίσασα τῶν ἀλγηδόνων· καὶ ἐπιζητήσασα βελόνην τὰ ἐσπαραγμένα συνέσφιγξεν, καὶ τὰς τρίχας τῆς κεφαλῆς περι- 5 ἔδρυσεν· (οὐ γὰρ ἔπρεπεν τῇ μάρτυρι θριξίν σπαραχθείσαις ὁράσθαι· ἵνα μὴ ἐν τῇ ἰδίᾳ τιμῇ δοκῇ πενθεῖν.)

[Καὶ κρατισθεῖσαν ἰδοῦσα τὴν Φηλικητάτην, προσήλθεν αὐτῇ] καὶ κρατήσασα τῆς χειρὸς αὐτῆς ἤγειρεν αὐτήν. καὶ ἔστησαν ἅμα· τῆς δὲ σκληρότητος τοῦ ὄχλου ἐκνικηθείσης 10 ἀνελήφθησαν εἰς τὴν πύλην τὴν ζωτικὴν· ἐκεῖ ἡ Περπετούα ὑπὸ τινος κατηχομένου ὀνόματι Ῥουστίκου ὃς παρεισθίκει αὐτῇ ὡς ἐξ ὕπνου ἐγερθεῖσα (οὕτως ἐν πνεύματι γέγονεν ἔκστασιν παθοῦσα), καὶ περιβλεψαμένη θαμβούντων ἀπάντων ἔφη· Πότε βαλλόμεθα πρὸς τὴν δάμαλιν ἣν λέγουσιν; καὶ 15 ἀκούσασα ὅτι ἡδὴ ἐξεληλύθει πρὸς αὐτήν, οὐ πρότερον ἐπίστευσεν πρὶν ἢ σημεία τινα τῆς βλάβης ἐν τῷ ἰδίῳ σώματι ἑώρακει· ἀναδειχθέντων δὲ καλέσασα τὸν ἴδιον ἀδελφὸν καὶ αὐτὸν τὸν κατηχούμενον παρεκάλει ἵνα ἐν πίστει διαμείνωσιν καὶ ἀλλήλους ἀγαπῶσιν, καὶ τοῖς παθήμασιν ἐκείνοις μὴ 20 σκανδαλισθῶσιν τοιοῦτοις οὖσιν.

XXI. Καὶ ἐν ἑτέρᾳ πύλῃ ὁ Σάτυρος τῷ στρατιώτῃ Πούδεντι προσομίλει, καθόλου λέγων ὅτι, Κατὰ τὴν πρόλεξιν τὴν ἐμήν, ὡς καὶ προεῖπον, οὐδὲ ἐν θηρίων ἡψατό μου ἕως ἄρτι· ἰδοὺ δὲ νῦν, ἵνα ἐξ ὅλης καρδίας διαπιστευέσῃς, προσέρχομαι, καὶ ἐν ἐνὶ 25 δῆγματι παρδάλεως τελειοῦμαι· καὶ εὐθὺς ἐν τέλει τῆς θεωρίας πάρδαλις αὐτῷ ἐβλήθη, καὶ ἐν ἐνὶ δῆγματι τοῦ αἵματος τοῦ ἀγίου ἐνεπλήσθη· τοσοῦτον [δὲ] αἷμα ἐρῥύη, ὡς λογισθῆναι δευτέρου βαπτισμοῦ μαρτύριον· καθὼς καὶ ἐπεφώνει ὁ ὄχλος βοῶν καὶ λέγων· Καλῶς ἐλούσω· καλῶς ἐλούσω. καὶ μὴν 30 ὑγίης ἦν ὁ τοιοῦτῳ τρόπῳ λελουμένος.

- | | | | |
|--|---------------------------|-----------------|------------|
| 1. cod. ^e κρατηθησα (sic). | 3. αιδον. | 6. σπαραχθησαν. | 7. δωκει. |
| 8. cod. om. [] transiliens a κρατισθεισαν ad κρατησασα. | 18. αναδειχθη- | | |
| σασα. | C. xxi., l. 26. δειγματι. | 27. δειγματι. | 28. ερρει. |
| 29. δευτερον. | επεφωνη. | | |

this by a reference to Haupt: "in colloquiis quae ex codice Montepessulano 306 (saec. ix) nuper edidit Hauptius in indice lectionum univ. Berolinensis m. Oct. a. 1871, p. 8, καλῶς ἔλουσον (scr. ἐλούσω) κύριε, salvum lutum (sic) domine." Aubé gives the equivalent καλῶς ἔλουσον and refers to *Notices et Extraits des MSS.* xxiii. p. 322, where the spelling would seem to imply that this is the same ms. as quoted

utique salvus erat, qui hoc modo laverat¹. Tunc Pudenti militi: Vale, inquit, et memor esto fidei meae; et haec te non conturbent, sed confirment. Simulque anulam² de digito eius petiit, et vulneri suo mersam reddidit ei, beatam hereditatem, relinquens ei pignus et memoriam tanti sanguinis³. Exinde iam exanimis prosternitur cum ceteris ad iugulationem solito loco. Et cum populus illos in medium postularet, ut gladio penetrante in eorum corpore oculos suos comites homicidii adiungeret; ultro surrexerunt, et se quo volebat populus transtulerunt: ante iam osculati invicem, ut martyrium per solemnita pacis consummarent. Ceteri quidem immobiles, et cum silentio ferrum receperunt: multo magis Satorius: qui et prior scalam ascenderat, prior reddidit spiritum, nam et Perpetuam sustinebat. Perpetua autem, ut aliquid doloris gustaret, inter ossa compuncta⁴ exululavit; et errantem dexteram tirunculi gladiatoris ipsa in iugulum suum posuit⁵. Fortasse tanta femina aliter non potuisset occidi: quia ab immundo timebatur, nisi ipsa voluisset.

O fortissimi ac beatissimi Martyres! O vere vocati et electi in gloriam Domini nostri Iesu Christi; quem qui magnificat, et honorificat, et adorat, utique et haec non minus veteribus exempla in aedificationem Ecclesiae legere debet, ut novae quoque virtutes unum et eundem semper Spiritum sanctum usque adhuc operari testificentur; et omnipotentem Deum Patrem et Filium eius Iesum Christum Dominum nostrum, cui est claritas et immensa potestas in Saecula Saeculorum. Amen.

¹ Sic H, Ed. spectaculo claruerat.

² S, anulum.

³ Sic S, Ed. habet *reddidit ei*, hereditatem pignoris relinquens illi, et memoriam sanguinis.

⁴ Sic H, Ed. costas puncta.

⁵ H, transtulit.

by Haupt. As to the third formula, we have given 'peripsema sume,' i.e. 'take a towel,' as suggested by Haupt; but it is an open question whether it is not really a transliteration of *περιψημά σου* ('your devoted servant'); the three sentences on the mosaic being thus three forms of address to the person bathed by the bathman. The use of such conventional formulae is well illustrated by Oriental life; as for instance in the case of shaving where the barber concludes his task by the words "may God make it agreeable to you."

A similar inscription in mosaic is given amongst the inscriptions from Mauretania (*C. I. L.* viii. 2, no. 8424. Cf. additamenta in p. 970): which may be read as follows: *bene laves: oze=(hodie) a[ssem] des, cras gratis: res tuta. Salvu[s] laves et bono [eius] q[u]li fieri jussit ex s[uo] parcimonio*. One would imagine therefore that it was a common thing to work such devices into the mosaics of baths.

καὶ δακτύλιον αἰτήσας. The optiones of the legion all wore rings: thus we have in *C. I. L.* viii. 2554 an inscription from the camp at Lambaesis where the

Τότε τῷ στρατιώτῃ Πούδεντι ἔφη· Ὑγαίνει καὶ μνημόνευε πίστεως καὶ ἔμου· καὶ τὰ τοιαῦτα καὶ στερεωσάτω σε μᾶλλον ἢ ταραξάτω.

Καὶ δακτύλιον αἰτήσας παρ' αὐτοῦ καὶ ἐνθεὶς αὐτὸ τῷ ἰδίῳ αἵματι ἔδωκεν αὐτῷ μακαρίαν κληρονομίαν, ἀφείς μνήμην καὶ 5 ἐνθήκην αἵματος τηλικούτου. μετὰ ταῦτα λοιπὸν ἐμπνέων ἔτι ἀπήχθη μετὰ καὶ τῶν ἄλλων τῷ συνήθει τόπῳ· εἰς σφαγὴν δὲ ὁ ὄχλος ἤτησεν αὐτοὺς εἰς μέσον μεταχθῆναι, ὅπως διὰ τῶν ἁγίων σωμάτων ἐλαυνόμενον τὸ ξίφος θεάσωνται· καὶ οἱ μακάριοι μάρτυρες ἐκόντες ἡγέρθησαν· ἤσχύνοντο γὰρ 10 ὀλίγους μάρτυρας ἔχειν ἐπὶ τῷ μακαρίῳ θανάτῳ αὐτῶν.

Καὶ δὴ ἐλθόντων αὐτῶν ὅπου ὁ ὄχλος ἐβούλετο πρῶτον κατεφίλησαν ἀλλήλους ἵνα τὸ μυστήριον διὰ τῶν οἰκείων τῆς πίστεως τελειώσωσιν· καὶ μετέπειτα ἀσμένως ὑπέμειναν τὴν διὰ τοῦ ξίφους τιμωρίαν· πολλῶ δὲ μᾶλλον ὁ Σάτυρος, ὁ δὴ πρότερος τὴν κλίμακα 15 ἐκείνην ἀναβάς, ὃς καὶ ἔπεισεν τὴν Περπετούαν ἀναβαίνειν.

Ἡ δὲ Περπετούα ἵνα καὶ αὐτὴ γεύσῃται τῶν πόνων περὶ τὰ ὅστέα νυγείσα ἠλάλαξεν, καὶ πεπλανημένην τὴν δεξιὰν ἀπείρου μονομάχου κρατήσασα προσήγαγεν τῇ κατακλείδι ἐαυτῆς· ἴσως τὴν τοσαύτην γυναικα τοῦ ἀκαθάρτου πνεύματος φοβουμένου 20 [φονεῦσαι], φονευθῆναι μὴ βουλομένην.

Ὡ ἀνδριώτατοι καὶ μακαριώτατοι μάρτυρες καὶ στρατιῶται ἐκλεκτοί, εἰς δόξαν Κυρίου Ἰησοῦ Χριστοῦ κεκλημένοι. πῶς μεγαλύνωμεν ὑμᾶς ἢ μακαρίσωμεν, γενναϊότατοι στρατιῶται; οὐκ ἦσσαν τῶν παλαιῶν γραφῶν, ἃ εἰς οἰκοδομὴν ἐκκλησίας 25 [ἀναγινώσκεται], ἀναγινώσκεσθαι ὀφείλει ἡ πανάρετος πολιτεία τῶν μακαρίων μαρτύρων * * * * * δι' ὧν δόξαν ἀναπέμπομεν τῷ πατρὶ τῶν αἰώνων, ἅμα τῷ μονογενεῖ αὐτοῦ υἱῷ τῷ Κυρίῳ ἡμῶν Ἰησοῦ Χριστῷ σὺν ἁγίῳ πνεύματι· ᾧ ἡ δόξα καὶ τὸ κράτος εἰς τοὺς αἰῶνας τῶν αἰώνων. Ἀμήν. 30

- | | | | |
|-------------------------------|--------------------|-----------------------------|------------------|
| 1. Πουδεντιω. | 7. εισφαγην (sic). | 9. θεασονται. | 10. ισχυνοντο. |
| 12. και δει. | 14. ασμενος. | 16. ως και εφησεν. | 18. πεπλανημενη. |
| 19. κατακληδη. | 20. του· cod. υπο. | 21. cod. om. φονευσαι. | cod. |
| και φονευθηναι μη βουλομενου. | 25. ισον. | 26. cod. om. αναγινωσκεται. | |
| 27. desunt quaedam : cf. Lat. | | | |

formation of a college and the foundation of a schola by the optiones of one of the legions: there are sixty of these optiones corresponding to the sixty centurions: the concluding part of the inscription (veterani quoque missi accipiant kal. Jan. anularium) decrees that all the discharged veterans should receive a ring on the Kalends of January. Pudens' ring is probably something of the same kind.

πεπλανημένην. Cf. *Passio Cypriani* 186, "labente dextera gladium vix trementibus digitis circuibat."

APPENDIX.

THE SHORTER LATIN ACTS OF THE MARTYRDOM OF PERPETUA AND FELICITAS¹.

FACTA persecutione sub Valeriano et Gallieno consulibus, comprehensi sunt venerabiles viri iuvenes Saturus et Saturninus, duo fratres, Revocatus et Felicitas soror eius et Perpetua quae erat de nobili genere et habebat patrem et matrem et duos fratres et filium ad mamillam. Annorum enim erat illa duorum et viginti, apud Africam in civitate Zabarbitanorum.

Minutius proconsul dixit ad eos: "Invictissimi principes Valerianus et Gallienus iusserunt ut sacrificetis."

Saturus respondit: "Hoc non sumus facturi, Christiani enim sumus."

Proconsul iussit eos recludi in carcerem; siquidem hora erat prope tertia.

Audiens vero pater Perpetuae eam esse comprehensam cucurrit ad carcerem et videns eam dixit: "Quid hoc fecisti, filia, dehonestasti enim generationem tuam. Nunquam enim de genere nostro aliquis missus est in carcerem."

Perpetua vero dixit ad eum: "Pater, ecce, verbi gratia, vides vas iacens aut fictile aut cuiuslibet generis?"

Et ille respondit: "Video, quid ad haec?"

Perpetua dixit: "Numquid aliud nomen potest habere quam quod est?"

At ille respondit: "Non."

Perpetua dixit: "Nec ego aliud nomen accipere possum quam quod sum Christiana." Tunc pater eius audito verbo irruit super eam, volens oculos eius eruere; et exclamans, confusus, egressus est foras.

Orantes vero et sine cessatione preces ad Deum effundentes, cum

¹ As given by Aubé from the MSS. 5269, 5279, 5292, 5297, 5311, 5318, 5349, of the National Library at Paris.

essent multis diebus in carcere, quadam nocte videns visum sancta Perpetua, alia die retulit commartyribus suis ita dicens :

“Vidi in visu hac nocte scalam erectam mirabili altitudine usque ad caelum, et ita erat angusta ut nonnisi unus per eam ascendere posset. Dextra vero laevaue inerant fixi cultri et gladii ferrei ut nullus circa se nisi ad coelum respicere posset. Sub ea vero iacebat latens draco teterrimus ingenti forma, ut prae metu eius quivis ascendere formidaret. Vidi etiam ascendentem per eam Saturum usque ad sursum et respicientem ad nos et dicentem : ne vereamini hunc draconem qui iacet ; confortamini in gratia Christi, ascendite et nolite timere ut mecum partem habere possitis. Vidi etiam iuxta scalam hortum ingentem, copiosissimum et amoenum et in medio horto sedentem senem in habitu pastoralis et mulgentem oves et in gyro eius stantem multitudinem candidatorum : et aspiciens ad nos vocavit ad se et dedit nobis omnibus de fructu lactis. Et cum gustassemus, turba candidatorum responderunt “Amen” et sic prae clamore vocum sum expergefacta.”

At vero illi cum haec audissent gratias agentes insufficienter domino cognoverunt ex revelatione beatissimae Perpetuae ad martyrii coronam dignos esse effectos.

Post haec vero procedens Minutius proconsul et sedens pro tribunali eos exhiberi praecepit dixitque ad eos : “Sacrificate diis, sic enim iusserunt perpetui principes.”

Saturus respondit : “Deo magis oportet sacrificare quam idolis.”

Proconsul dixit : “Pro te respondes, aut pro omnibus?”

Saturus dixit : “Pro omnibus, una enim est in nobis voluntas.”

Proconsul ad Saturninum, Revocatum, Felicitatem et Perpetuam dixit : “Vos quid dicitis?”

At illi responderunt : “Verum est, unam gerimus voluntatem.”

Proconsul iussit viros a mulieribus separari et ad Saturum dixit : “Sacrifica, iuvenis, et ne te meliorem quam principes iudices esse.”

Saturus respondit : “Meliolem me iudico apud verum principem et praesentis et futuri saeculi, si colluctando pati meruero.”

Proconsul dixit : “Suade tibi, et sacrifica, iuvenis.”

Saturus respondit : “Hoc ego non sum factur.”

Proconsul ad Saturninum dixit : “Sacrifica vel tu, iuvenis, ut valeas vivere.”

Saturninus respondit : “Christianus sum et hoc mihi facere non licet.”

Proconsul ad Revocatum dixit : “Forte et tu sequeris voluntatem illorum.”

Revocatus respondit : “Eorum plane propter Deum sequor desideria.”

Proconsul dixit : “Sacrificate ne vos interficiam.”

Revocatus respondit: "Deum oramus ut hoc mereamur."

Proconsul eos removeri praecepit et Felicitatem et Perpetuam sibi iussit offerri. Dixit autem ad Felicitatem: "Quae diceris?"

Respondit: "Felicitas."

Proconsul dixit: "Virum habes?"

Felicitas respondit: "Habeo quem nunc contemno."

Proconsul dixit: "Ubi est?"

Felicitas dixit: "Non est hic."

Proconsul dixit: "Quo genere est?"

Felicitas respondit: "Plebeius."

Proconsul dixit: "Parente(s) habes?"

Felicitas dixit: "Non habeo: Revocatus vero congermanus meus est. Verumtamen his maiores parentes habere non potero."

Proconsul dixit: "Miserere tui, puella, et sacrificia ut vivas, maxime quia te infantem in utero habere video."

Felicitas respondit: "Ego Christiana sum et haec omnia mihi propter Deum contemnere praecepta sunt."

Proconsul dixit: "Consule tibi, doleo enim de te."

Felicitas respondit: "Fac quod vis, mihi enim persuadere non poteris."

Proconsul ad Perpetuam dixit: "Quid dicis, Perpetua, sacrificas?"

Perpetua, "Christiana, inquit, sum et nominis mei sequor auctoritatem, ut sim perpetua."

Proconsul dixit: "Parentes habes?"

Perpetua respondit: "Habeo."

Audientes vero parentes eius pater, mater, fratres, et maritus simulque cum parvulo eius qui erat ad lac venerunt cum essent de nobili genere. Et videns eam pater eius stantem ante proconsulis tribunal cadens in faciem suam dixit ad eam: "Filia, iam non filia, sed domina, miserere aetati meae patris tui, si tamen mereor dici pater, miserere et matris tuae, quae te ad talem florem aetatis perduxit, miserere et fratribus tuis, et huic infelicissimo viro tuo, certe vel parvulo huic qui post te vivere non poterit. Depone hanc cogitationem tuam. Nemo enim nostrum post te vivere poterit, quia hoc generi meo nunquam contigit."

Perpetua vero stabat immobilis et respiciens in caelum dixit ad patrem suum: "Pater, noli vereri, Perpetuam enim filiam tuam, si non obstiteris, perpetuam filiam tuam possidebis."

Proconsul dixit: "Moveant te et excitent ad dolorem lacrymae parentum tuorum, praeterea voces parvuli tui."

Perpetua dixit: "Movebunt me lacrymae eorum, si a conspectu domini et a consortio horum sanctorum, cum quibus secundum visionem meam fratribus bonis sum copulata, fuero aliena inventa."

Pater vero iactans infantem in collum eius et ipse cum matre et marito tenentes manus eius et flentes osculabantur dicentes: "Miserere nostri, filia, et vive nobiscum." At illa prospiciens infantem eosque repellens dixit: "Recedite a me operarii iniquitatis, quia non novi vos. Non enim potero maiores et meliores vos facere quam deum qui me ad hanc gloriam perducere dignatus est."

Videns vero proconsul eorum perseverantiam, data sententia Saturnum, Saturninum et Revocatam flagellis caesos, et Perpetuam et Felicitatem exalapatas in carcerem recipi praecepit ut in Caesaris natale bestiis mitterentur.

Et cum essent in carcere iterum vidit visionem Perpetua Aegyptium quemdam horridum et nigrum iacentem et volutantem se sub pedibus eorum, retulitque sanctis fratribus et commartyribus suis. At illi intelligentes, gratias egerunt domino, qui, prostrato inimico generis humani, eos laude martyrii dignos habuerit.

Contristantibus vero iis de Felicitate quod esset praegnans in mensibus octo, statuerunt unanimiter pro ea precem ad Dominum fundere. Et dum orarent subito enixa est vivum. Quidam vero de custodibus dixit ad eam: "Quid factura es cum veneris in amphitheatrum quae talibus detineris tormentis?"

Felicitas respondit: "Hic ego crucior, ibi vero pro me Dominus patietur."

Facto itaque die natali Caesaris concursus ingens fiebat populi in amphitheatrum ad spectaculum eorum.

Procedente vero proconsule eos ad amphitheatrum perducere praecepit. Euntibus vero eis sequebatur Felicitas quae ex sanguine carnis ad salutem sanguinis ducebatur et de obstetrice ad gladium et de lavatione post partum balnei sanguinis effusione meruit delavari.

Adclamante vero turba positi sunt in medio amphitheatri nudi, ligatis post tergum manibus, et dimissis bestiis diversis, Satorius et Perpetua a leonibus sunt devorati. Saturninus vero ab ursis erutus gladio est percussus. Revocatus vero et Felicitas a leopardis gloriosum agonem impleverunt.

Horum ergo famosissimorum et beatissimorum Martyrum, sanctissimi fratres, qui passi sunt sub Valeriano et Gallieno imperatoribus apud Africam in Civitate Zabarbitanorum sub Minutio proconsule die nonarum Martiarum fideliter memoriis communicantes actus eorum in ecclesia ad edificationem legite, precantes Dei misericordiam ut orationibus eorum et omnium sanctorum nostri misereatur, atque participes eorum efficere dignetur in gloriam et laudem nominis sui quod est benedictum in saecula saeculorum. Amen.

NOTES ON THE TRIANGLE.

I USE the lettering adopted in Casey's *Sequel to Euclid*.
In the triangle ABC

G is the centroid,
 H the orthocentre,
 K the symmedian point,
 N the nine-points centre,
 O the circum-centre,
 T the Tarry point,
 Ω, Ω_1 the Brocard points,
 ω the Brocard angle.

Also I call

Γ the circum-circle,
 U the minimum circumscribed ellipse,
 U_1 the maximum inscribed ellipse,
 F, F_1 the foci of U ,
 V the Kiepert hyperbola,
 K_1 the isotomic conjugate of K ,
 L the fourth intersection of T, U ,
 L_1 the point opposite to L on U ,
 M the middle point of GL_1 ,
 X, X_1 the equiangular points,

the equiangular points being those points at which BC, CA, AB subtend equal or supplementary angles. They are familiar as the intersections of lines joining A, B, C to the vertices of equilateral triangles described, all outwards or all inwards, on BC, CA, AB . See Catalan, *Problèmes de Géométrie*, Book II. Th. 2, where the theorem is limited to exterior equilateral triangles; and a note by Prince de Polignac, *Educational Times Reprint*, Vol. XXXI. p. 40, where again only one of the points is considered.

In Milne's *Companion to Weekly Problem Papers*, Mr Simmons gives an essay on the recent geometry of the triangle, in which (p. 165) he makes use of this same point. He terms it the equiangular point. I use here the term for both points.

In the first place it is clear that the normals to U at ABC meet at H , that G is the centre of U and U_1 , that the axes of U , U_1 coincide in direction and are in the ratio $2/1$, and that HL_1 (Salmon, *Conics*, § 244) is the fourth normal to U .

Since G is a homothetic centre for ABC and the triangle formed by the middle points of the sides, it is easily seen that M is the fourth intersection of U_1 and the nine-points circle; for $GL = 2GM$.

The areal coordinates or equations are :

$$\text{for } G, 1, 1, 1,$$

$$H, 1/(b^2 + c^2 - a^2), \dots$$

$$K, a^2, b^2, c^2,$$

$$O, b^2 + c^2 - a^2, \dots$$

$$N, a^2(b^2 + c^2) - (b^2 - c^2)^2, \dots$$

$$T, 1/(b^4 - c^2a^2 + c^4 - a^2b^2), \dots \text{ (Milne, } op. cit., p. 177),$$

$$\Omega, c^2a^2, a^2b^2, b^2c^2,$$

$$\Omega_1, a^2b^2, b^2c^2, c^2a^2,$$

$$K_1, b^2c^2, c^2a^2, a^2b^2,$$

$$X, 1/(\sqrt{3} \cot A + 1), \dots \text{ (de Polignac, } ut\ supr\grave{a}),$$

$$X_1, 1/(\sqrt{3} \cot A - 1), \dots$$

$$\Gamma, a^2yz + b^2zx + c^2xy = 0,$$

$$U, yz + zx + xy = 0,$$

$$U_1, \sqrt{x} + \sqrt{y} + \sqrt{z} = 0,$$

$$V, (b^2 - c^2)yz + (c^2 - a^2)zx + (a^2 - b^2)xy = 0 \text{ (Milne, p. 179),}$$

$$L, 1/(b^2 - c^2), \dots$$

$$L_1, 3(b^2 - c^2)^2 + \Sigma b^2c^2 - \Sigma a^4, \dots$$

$$M, (b^2 - c^2)^2, (c^2 - a^2)^2, (a^2 - b^2)^2,$$

the last two being obtained from the fact that they divide GL in known ratios.

Some of the results here given were obtained by working with the axes of U as axes of Cartesian coordinates, and though I give

for Ω , $2\xi/\alpha = -\alpha_1 \cos 3\theta/\alpha + \beta_1 \sin 3\theta \cdot \sqrt{3}/\beta$,

$$2\eta/\beta = -\beta_1 \sin 3\theta/\beta - \alpha_1 \cos 3\theta \cdot \sqrt{3}/\alpha,$$

where $\alpha_1 = \alpha(\alpha^2 - \beta^2)/(\alpha^2 + 3\beta^2)$, $\beta_1 = \beta(\alpha^2 - \beta^2)/(3\alpha^2 + \beta^2)$,

for Ω_1 the sign of $\sqrt{3}$ must be changed,

K_1 is $\alpha_1 \cos 3\theta$, $\beta_1 \sin 3\theta$.

In getting these it is well to use the fact that if p, q, r are the distances of A, B, C from an axis, that of the point whose areal coordinates are x, y, z is $px + qy + rz$ (Wolstenholme, Problem 1292).

Also for Γ , $2(\xi^2 + \eta^2) - (\alpha^2 - \beta^2)(\xi \cos 3\theta/\alpha - \eta \sin 3\theta/\beta) = \alpha^2 + \beta^2$,

$$\text{for } V, 2\xi\eta = \beta\xi \sin 3\theta - \alpha\eta \cos 3\theta.$$

If we describe arcs on BC, CA, AB each containing an angle θ , the arc in each case being on the same side as the third angle, their radical centre is (see Wolstenholme, Problem 1307; Milne, p. 179)

$$x(\cot A - \cot \theta) = y(\cot B - \cot \theta) = z(\cot C - \cot \theta) \dots (1),$$

and eliminating θ we get V in the form

$$\begin{vmatrix} x \cot A, & x, & 1 \\ y \cot B, & y, & 1 \\ z \cot C, & z, & 1 \end{vmatrix} = 0.$$

It is verified straightforwardly from (1) that

G is the point for which	$\theta = 0$ or π ,
H " "	$\theta = \pi/2$,
X " "	$\theta = 2\pi/3$,
X_1 " "	$\theta = \pi/3$,
K_1 " "	$\theta = \omega$,
T " "	$\theta = \pi/2 - \omega$,
L_1 " "	$\tan \theta = 3 \tan \omega$,

(so that *Tarry's point* is the fourth intersection of *Kiepert's hyperbola* and the circum-circle)..... (i)

The line joining the points θ, θ_1 is from (1)

$$x(\cot A - \cot \theta)(\cot A - \cot \theta_1)(\cot B - \cot C) + \dots = 0 \dots (2).$$

The centre of V is, by the usual method, $(b^2 - c^2)^2 \dots$ or M , i.e. *the centre of Kiepert's hyperbola* is the fourth intersection of the maximum inscribed ellipse and the nine-points circle.....(ii)

Substituting $(b^2 - c^2)^2$ or $(\cot B - \cot C)^2, \dots$, in the last equation, we get, on reducing and remembering that $\Sigma \cot B \cot C = 1$, $\Sigma \cot A = \cot \omega$, the condition that θ, θ_1 be a diameter,

$$3 \cot \theta \cot \theta_1 - \cot \omega (\cot \theta + \cot \theta_1) + 1 = 0,$$

so that GL_1, HT, XX_1 are diameters of V , or, omitting the first fact as included in (ii) and postponing the third, *the orthocentre and the Tarry point are ends of a diameter of Kiepert's hyperbola*. (iii)

Again, when $\theta_1 = \pi - \theta$ the line (2) passes through the fixed point given by

$$x \cot^2 A (\cot B - \cot C) + \dots = 0,$$

$$x (\cot B - \cot C) + \dots = 0,$$

and this point is $x (\cot B - \cot C) / (\cot^2 B - \cot^2 C) = \dots$

or
$$x = \cot B + \cot C,$$

or
$$x = a^2, y = b^2, z = c^2,$$

so that all lines joining points $\theta, \pi - \theta$ pass through K .

Hence XX_1 passes through K , or *the equiangular points are the ends of that diameter of Kiepert's hyperbola which passes through the symmedian*. (iv)

At G and H , θ is its own supplement, hence *the tangents to Kiepert's hyperbola at the orthocentre and centroid meet at the symmedian*. (v)

It follows that XX_1 bisects HG and TL_1 , and is parallel to GT and HL_1 . Hence XX_1 is normal to U_1 at M . G is obviously the centroid of LXX_1 and of LHT .

From the areal coordinates of Ω, Ω_1, K_1 it is obvious that G is their centroid.

Moreover if with centre G we describe an ellipse homothetic with U or U_1 ,

$$yz + zx + xy = K(x + y + z)^2,$$

and determine K from the condition that the ellipse passes through one of these points, it will from the symmetry pass through the others. Hence *the minimum ellipse about the triangle formed by the Brocard points and the isotomic conjugate of the symmedian point is concentric and homothetic with that about the given triangle*. (vi)

Now we know (Milne, p. 122, Ex. 2), that $\Omega\Omega_1$ is perpendicular to and bisected by KO . Let γ be their intersection (so that γ is the centre of the Brocard ellipse), then, since G is the centroid of $\Omega\Omega_1K_1$, γ, G, K_1 are collinear and $GK_1 = 2\gamma G$.

But $GH = 2 \cdot OG$, hence HK_1, KO are parallel.

The coordinates of γ are $a^2(b^2 + c^2), b^2(c^2 + a^2), c^2(a^2 + b^2)$, and comparing these with those of M and N we see that M, γ, N are collinear, or *the centres of the Kiepert's hyperbola, the Brocard ellipse, and the nine-points circle are collinear*..... (vii)

The line $M\gamma N$ is obviously parallel to TO . Also since $LG = 2GM, K_1G = 2G\gamma, OG = 2GN, T, O, K_1, L$ are collinear, or *the Tarry point and the fourth intersection of the minimum circumscribed ellipse and the circum-circle are ends of a diameter of the circum-circle, which passes through the isotomic conjugate of the symmedian and is parallel to the line in (vii)*..... (viii)

The rectangular hyperbola which passes through the feet of the normals from a point to a conic passes through the centre of the conic, and its asymptotes are parallel to the axes. V passes through the feet of the four normals from H , namely A, B, C, L_1 , and hence its asymptotes are parallel to the axes of U . Now the lines joining any point of the hyperbola to the ends of a diameter make equal angles with an asymptote, or with an axis of U . From this various geometric relations may be obtained. For instance, GX, GX_1 make equal angles with the axis FF_1 , and since from the Cartesian coordinates $GX = (\alpha - \beta)/2, GX_1 = (\alpha + \beta)/2$, we have $GX \cdot GX_1 = GF^2 = GF_1^2$. Hence FXF_1X_1 is a harmonic quadrangle, or *the equiangular points and the foci of the maximum inscribed ellipse are on a circle, and divide the circle harmonically* (ix)

Again, since GL_1 is a diameter of V and H a point on it, HG, HL_1 make equal angles with either axis of U . It follows that if the normal HL_1 meets the axes at gg_1, H bisects gg_1 . This gives a simple construction for describing the circle through L which cuts U again at the corners of a maximum triangle. For H gives the centre O at once. Also reference to Roberts, *Examples on Conics*, p. 4, and to the Cartesian coordinates given above for K_1 , shews that the circle with centre K_1 and radius K_1L cuts U at the corners of an equilateral triangle. Hence *if through a point on a conic two circles are drawn, one cutting the ellipse again at the*

corners of a maximum triangle, the other at the corners of an equilateral triangle, these circles will touch..... (x)

It is clear from the table of Cartesian coordinates that the sum of reciprocals of abscissas or ordinates for K, K_1, L is 0. Hence from the tangential equation $\Sigma 1/p = 0$ we see that the maximum ellipse inscribed in KK_1L will touch the axes of U_1 .

The remark may be made that for all maximum triangles in an ellipse, $a^2 + b^2 + c^2$ is constant and the area Δ is constant. Now $\cot \omega = \Sigma a^2/4\Delta$, hence *all maximum triangles in a given ellipse have equal Brocard angles..... (xi)*

The tangent to U_1 at M is

$$x/(b^2 - c^2) + y/(c^2 - a^2) + z/(a^2 - b^2) = 0.$$

Thus it is the polar with regard to the triangle of the point at ∞ in the direction perpendicular to HO , and meets the sides BC, CA, AB at points on the tangents to V at A, B, C , and also on GA_1, GB_1, GC_1 if AA_1, BB_1, CC_1 are diameters of V . Also if the fourth common tangent of U_1 and the Brocard ellipse

$$\sqrt{x/a} + \sqrt{y/b} + \sqrt{z/c} = 0$$

touches them at t_1 and t , then it is easy to see that t_1 is on the line just mentioned, and that Mt is a tangent to the nine-points circle. But there is no need to multiply such relations unless they are well defined or highly principled.

FRANK MORLEY.



Mosaic of Perpetua in the Archbishop's Palace, Ravenna.

Copied from the original by Edward Backhouse.



Mosaic of Felicitas in the Archbishop's Palace, Ravenna.

Copied from the original by Edward Backhouse.

HAVERFORD COLLEGE STUDIES

Published by the Faculty of

HAVERFORD COLLEGE.

No. 4

Price \$1.

CONTENTS.

	PAGE
On the numerical characteristic of a Cubic Curve. Charlotte Angas Scott.	1
On the caustic of the Epicycloid. Frank Morley	9
Sun-spot Observations. H. V. Gummere and F. P. Leavenworth . .	17
On a new MS. of the Four Gospels. W. C. Braithwaite	22
A Catalogue of Manuscripts (chiefly Oriental) in the Library of Haverford College. Robert W. Rogers	28
The Passion of Perpetua. Translated by Seth K. Gifford	51
Specimens of Uncial Lectionaries from Mount Sinai. J. Rendel Harris	64

To obtain copies of this publication address the Secretary of Haverford College, Haverford College P. O., Pa.

ON THE NUMERICAL CHARACTERISTIC OF A CUBIC CURVE.

USING the canonical form for the non-singular cubic

$$x^3 + y^3 + z^3 + 6mxyz = 0,$$

the Hessian is $x^3 + y^3 + z^3 + 6pxyz = 0$, $6p = -\frac{1+2m^3}{m^2}$,

and the Cayleyan is $\xi^3 + \eta^3 + \zeta^3 + 6q\xi\eta\zeta = 0$, $6q = \frac{1-4m^3}{m}$;

the invariants of the cubic are taken to be

$$S = m^4 - m \text{ [i.e.—Salmon's } S, \text{ see } \textit{Higher Plane Curves}, \S 220],$$

$$T = 1 - 20m^3 - 8m^6,$$

so that $\Delta = T^2 - 64S^3 = (1 + 8m^3)^3$.

The absolute invariant is $S^3 : T^2$, or any convenient numerical multiple of this. Take 64 for the multiplier, and write $k = \frac{64S^3}{T^2}$,

so that $\Delta = T^2(1 - k)$,

then k is the numerical characteristic of the cubic, and is absolutely unalterable by projection. [H. P. C. § 198.]

This characteristic being given, we have an equation of the 12th degree for the determination of m ;

$$\text{viz.} \quad \frac{64m^3(m^3 - 1)^3}{(1 - 20m^3 - 8m^6)^2} = k \dots\dots\dots (A),$$

but the 12 values of m all indicate the same cubic.

For, with the canonical form of the cubic, the four inflexional triangles are,

$$\begin{aligned}\text{I.} \quad & xyz = 0, \\ \text{II.} \quad & x^3 + y^3 + z^3 - 3xyz = 0, \\ \text{III.} \quad & x^3 + y^3 + z^3 - 3\varpi xyz = 0, \\ \text{IV.} \quad & x^3 + y^3 + z^3 - 3\varpi^2 xyz = 0,\end{aligned}$$

where ϖ is an imaginary cube root of unity.

Taking successively II, III, IV, as fundamental triangle, the equation of the cubic is still in the canonical form, but with different values for m . Calling these m_2, m_3, m_4 , we find

$$m_2 = \frac{1-m}{1+2m}, \quad \{=f_2(m)\};$$

$$m_3 = \frac{1-m\varpi^2}{\varpi+2m}, \quad \{=f_3(m)\};$$

$$m_4 = \frac{1-m\varpi}{\varpi^2+2m}, \quad \{=f_4(m)\}.$$

If now m satisfies equation (A), m_2, m_3, m_4 also satisfy it. Again, the equation being of the 4th degree in m^3 , if m is a root, so are also $m\varpi$ and $m\varpi^2$. We have thus the 12 roots

$$\begin{aligned}m, \quad & f_2(m), \quad f_3(m), \quad f_4(m); \\ m\varpi, \quad & f_2(m\varpi), \quad f_3(m\varpi), \quad f_4(m\varpi); \\ m\varpi^2, \quad & f_2(m\varpi^2), \quad f_3(m\varpi^2), \quad f_4(m\varpi^2);\end{aligned}$$

which may also be written

$$\begin{aligned}m, \quad & m_2, \quad m_3, \quad m_4; \\ m\varpi, \quad & m_4\varpi^2, \quad m_2\varpi^2, \quad m_3\varpi^2; \\ m\varpi^2, \quad & m_3\varpi, \quad m_4\varpi, \quad m_2\varpi.\end{aligned}$$

Considering the first scheme, the four values of m given by any row correspond to the four reductions of a cubic to its canonical form, depending on the four inflexional triangles; but the cubics indicated by the three rows are not distinct. For the cubic $x^3 + y^3 + z^3 + 6mxyz = 0$ becomes, by the substitution

$$\begin{aligned}\varpi x : y : z \text{ for } x : y : z, \\ x^3 + y^3 + z^3 + 6m\varpi xyz = 0,\end{aligned}$$

so that the three rows indicate the same cubic.

The same thing appears in another way. If we start with m_2 , we get $f_2(m_2) = m$, $f_3(m_2) = m_2'$, $f_4(m_2) = m_2''$ (where the accents

denote the row, the suffixes the column), so that m_2, m, m_2', m_2'' belong to the same cubic; and similarly if we start with a different m .

We see then that given the numerical characteristic, the cubic, if non-singular, is uniquely determined.

The object of this paper is to give a graphic representation of the dependence of the cubic on its numerical characteristic. Before doing this, it will be convenient to notice some special cases, assigning known results to the corresponding values of k . The algebraical work is omitted as displaying nothing of interest.

(i) $k = 1$, there $\Delta = 0$, $2m = \infty, -1, -\varpi, -\varpi^2$; and the cubic, if non-singular, degenerates into three straight lines, and coincides with its Hessian, this happening in no other case. The lines are concurrent if both S and T vanish, otherwise not. For $2m = \infty$, T is $-$; and all the lines are real; for $2m = -1$, T is $+$; and the lines are one real, two imaginary.

If we remove the restriction that the cubic must be non-singular (i.e. give up this canonical form) and substitute the restriction that the cubic must be a proper cubic, then $k = 1$ represents a singular cubic, crunodal if T is $-$, acnodal if T is $+$, cuspidal if both S and T vanish.

If $k - 1$ is $+$, the cubic is Bipartite; if $k - 1$ is $-$, the cubic is Unipartite.

Applying this to the Hessian and Cayleyan, we see that they degenerate together, viz.: for the values $m = \infty, m = 1, 2m + 1 = 0$, i.e. $k = 0$ or 1 .

[It is interesting to notice that if we eliminate m from the equations giving the parameters of the Hessian and Cayleyan, i.e. from

$$6p = -\frac{1 + 2m^3}{m^2}, \quad 6q = \frac{1 - 4m^3}{m},$$

we obtain $24p^2q^2 - 6pq + 1 + 4(p^3 + q^3) = 0$, a result symmetrical in p, q .]

(ii) $k = 0$, i.e. $S = 0$, $\therefore m = 0, 1, \varpi, \varpi^2$.

We have then $6p = \infty, -3, -3\varpi, -3\varpi^2$, so that the Hessian is one of the inflexional triangles. The cubic is the 'equianharmonic' cubic, this name having reference to the special values of the

cross ratios of the pencil of tangents from any point on the curve; but the more interesting property of the cubic is that tangents at collinear inflexions are concurrent.

The nine inflexions of the cubic

$$x^3 + y^3 + z^3 + 6mxyz = 0,$$

being given by the following scheme

$$\begin{array}{ccc} 0.1.-1 & 0.\varpi.-1 & 0.1.-\varpi \\ -1.0.1 & -1.0.\varpi & -\varpi.0.1 \\ 1.-1.0 & \varpi.-1.0 & 1.-\varpi.0 \end{array}$$

[in which the inflexions in rows, columns, positive diagonals, and negative diagonals are collinear, the three rows e.g. determining the inflexional triangle xyz , and so on], we see that

1. if $m = 0$, the tangents at the inflexions on rows 1, 2, 3 are concurrent in $(1.0.0)(0.1.0)(0.0.1)$;

2. if $m = 1$, the tangents at the inflexions on columns 1, 2, 3 [i.e. on lines $x + y + z = 0$, $\varpi^2x + y + \varpi z = 0$, $\varpi x + y + \varpi^2z = 0$] are concurrent in $(1.1.1)(\varpi^2.\varpi.1)(\varpi.\varpi^2.1)$;

3. if $m = \varpi$, the tangents at the inflexions on the positive diagonals [i.e. on lines $\varpi x + y + z = 0$, &c.] are concurrent in $(1.\varpi.\varpi)$ &c.: and similarly,

4. if $m = \varpi^2$.

For these four values of m , the values of T are 1, -27 , -27 , -27 . The distinction in the cases is most easily seen if we confine ourselves to real cubics with a real fundamental triangle. If then $S = 0$, and T is +, the concurrent inflexional tangents are one real, two imaginary; if T is -, the concurrent inflexional tangents are all real or all imaginary. The three points of course are the three double points of the Hessian, these being the three points which represent the (degenerate) Cayleyan for this case (see Clebsch, *Vorlesungen*, Vol. II. ch. 2, iv.). We have then, for the cubic whose $k = 0$, the geometrical property:—‘The Hessian is an inflexional triangle; the tangents at the inflexions determined by a side are concurrent in the opposite vertex. If T is negative, one set of concurrent inflexional tangents will be real.’

The equianharmonic cubic for which T is negative is further

interesting as giving rise to a sextic of the third class, in which the three real cusps are collinear. This sextic is unipartite, the curve consisting of a single even circuit; but it cannot all be projected to a finite distance, for no straight line can be found that does not meet the curve in two real points. Thus it seems to elude the ordinary division into ovals and snakes.

(iii) $k = \infty$, i.e. $T = 0$. The cubic is the Harmonic cubic. The equation for m is

$$1 - 20m^3 - 8m^6 = 0,$$

$$\text{i.e. } (1 - 2m - 2m^2)(1 - 2\varpi m - 2\varpi^2 m^2)(1 - 2\varpi^3 m - 2\varpi m^2) = 0,$$

$$\therefore 2m = -1 \pm \sqrt{3}, \quad (-1 \pm \sqrt{3})\varpi, \quad (-1 \pm \sqrt{3})\varpi^2.$$

Here we have 6 values for m ; since we have in this case $\frac{1-m}{1+2m} = m$, where m has one of the real values, these 6 values represent the 8 values for the two cubics,

$$x^3 + y^3 + z^3 - 3(1 - \sqrt{3})xyz = 0,$$

$$x^3 + y^3 + z^3 - 3(1 + \sqrt{3})xyz = 0.$$

For the first of these, S is $-$, and $k = -\infty$; for the second, S is $+$, and $k = +\infty$.

The Hessian of a harmonic cubic is harmonic, since T of Hessian $= \frac{8}{27} T(72S^3 - T^2) = \frac{T^3}{27} (9k - 8)$, and therefore vanishes with T : but the Hessian is also harmonic if $k = \frac{8}{9}$.

The second Hessian of the cubic is the cubic itself if, and only if, the cubic is harmonic. For $6p = -\frac{1+2m^3}{m^2}$, and if we combine with this $6m = -\frac{1+2p^3}{p^2}$, and eliminate p , we have for the determination of m the equation $8m^6 + 20m^3 - 1 = 0$, i.e. $T = 0$. Of the two harmonic cubics given above, each is the Hessian of the other; and the Cayleyan of each is the reciprocal with regard to the fundamental triangle.

(iv) The invariants S and T for the Hessian being respectively $\frac{1}{9}(T^2 - 48S^3)$, $\frac{8}{27}T(72S^3 - T^2)$, we have, if k' be the numerical characteristic of the Hessian,

$$k' = \frac{(4 - 3k)^3}{(9k - 8)^2}.$$

If then $k = \frac{4}{3}$, the Hessian is equianharmonic, and the second Hessian of the cubic consists of three straight lines.

(v) When k' is given, we have a cubic equation for k , representing the well-known fact that given the Hessian, we know only that the cubic is one of a group of three. One of these is necessarily real; the other two will be real or imaginary according as $k' - 1$ is $+$ or $-$ (unless $k' = 0$), i.e. the bipartite Hessian determines a group of three real unipartite cubics; but the unipartite Hessian determines only one real bipartite cubic.

Two of the group of three will coincide (1) if $k' = 1$; then $k = 0, 0, 1$; (2) if $k' = \infty$; then $k = \frac{8}{9}, \frac{8}{9}, -\infty$; and all the members of the group coincide (1) if $k' = 0$, and then $k = \frac{4}{3}$; (2) if $k' = -\infty$, and then $k = +\infty$.

(vi) The S of the Hessian is negative from $k = +\infty$ to $k = \frac{4}{3}$, positive from $k = \frac{4}{3}$ to $k = -\infty$. The T of the Hessian has the same sign as T from $k = +\infty$ to $k = \frac{8}{9}$, the opposite sign to T from $k = \frac{8}{9}$ to $k = -\infty$. For the variation in the numerical characteristic of the Hessian we have:— k' is negative from $k = +\infty$ ($k' = -\infty$) to $k = \frac{4}{3}$ ($k' = 0$); positive and increasing from $k = \frac{4}{3}$ to $k = \frac{8}{9}$ ($k' = +\infty$); positive and decreasing from $k = \frac{8}{9}$ to $k = 0$ ($k' = +1$, minimum); positive and increasing from $k = 0$ to $k = -\infty$ ($k' = +\infty$). It appears then that the critical values of k are $\infty, \frac{4}{3}, 1, \frac{8}{9}, 0, -\infty$.

In general, when S is given, the distinction between real and imaginary depends on the sign of T , the negative value of T in general indicating that the property in question is to be predicated of real elements.

To consider the essential dependence of the curve on S , it is convenient to consider the cubic

$$y^2z = x^3 + \left(\frac{1}{p^2} - 3\right)x^2z + \left(3 - \frac{2}{p}\right)xz^2.$$

Here the line of inflexions is $x - z = 0$, IB ; $z = 0$ (IC) is tangent at the inflexion I ; $y = 0$ is the harmonic polar of I ; the inflexional tangents $\frac{1}{p}x - z \pm y = 0$ intersect at $p : 0 : 1$, i.e. K . If $p = 1$, this cubic is crunodal; if $p = -\frac{1}{3}$ or $+\frac{2}{3}$ it is acnodal; cuspidal if $p = 0$. It is bipartite or unipartite according as $(1 - p)(1 + 3p)$ is positive

or negative. The invariant S is a numerical multiple of

$$\frac{6p^3 - 6p^2 + 1}{p^4},$$

and therefore vanishes only for two real values of p , viz. $p = \infty$ and a value between $-\frac{1}{3}$ and $-\frac{2}{3}$.

Consider cases from $p = \frac{2}{3}$ through $+\infty$ to some negative value, e.g. -2 . Figs. (1), (2), (3), (4), (5), (6), illustrate these in essentials for $p = \frac{2}{3}, \frac{6}{7}, 1, 2, \infty, -2$. In fig. 4, the real inflexional tangents 'overlap,'—that is, the tangents to the cubic visibly sweep over the whole plane, so that the cubic is necessarily unipartite. From $p = -\infty$ to $p = -\frac{1}{3}$, this exclusion of the rest of the plane is accomplished by the 'overlapping' of the imaginary inflexional tangents, the change from the sets of inflexional tangents determined by one inflexional triangle to those determined by another occurring, I imagine, simultaneously with the vanishing of S or T . This would give, for unipartite cubics:—the tangents determined by inflexional triangle no. II. overlap if S is positive, T negative, the remaining triangles I., III., IV., corresponding, in some order, to S and T positive, S and T negative, S negative and T positive. The results of figs. 1—6 are collected in fig. 7, in which p is regarded as the abscissa of K on the line ABC , so that the points A, B, C have abscissæ 0, 1, ∞ .

To represent these conclusions graphically, consider $4S, T$, as the Cartesian coordinates of a point in a plane. Every cubic is thus represented by a point in the plane; all cubics having the same numerical characteristic are represented by points on the semi-cubical parabola $x^3 = ky^2$; and restricting ourselves either to non-singular cubics or to proper cubics, we have the theorem:— 'all cubics represented by points on a semi-cubical parabola can be projected into one another, the projection being real when the points are on the same branch, otherwise imaginary.'

The bipartite cubics are represented by points on the convex side of the discriminating cubic $x^3 = y^2$, fig. 8, the unipartite cubics by points on the concave side. The discriminating cubic itself represents the singular cubics, if the cubics are restricted to be proper cubics; the degenerate cubics, if we confine ourselves to Hesse's canonical form, as it is convenient to do when we want to represent the cubic and its Hessian on the same diagram.

The cubics for which $k = \infty, \frac{4}{3}, 1, \frac{8}{9}, 0, -\infty$ are marked $u_1, u_2 u'_2, u_3 u'_3, \dots u_6$ in the diagram; their Hessians are $h_1, h_2 h'_2, h_3 h'_3, \dots h_6$. If a cubic lies in the division a , its Hessian lies in α , and so on. The curves on which u and h are marked are for the sake of clearness.

Thus, for example, if the characteristic of a cubic lies between 1 and $+\infty$, and its invariant T is negative, it lies, quâ Hessian, in divisions $\gamma', \delta, \epsilon$; and consequently the three cubics that have it for their Hessian are real, and lie in divisions c', d, e ; they have therefore

- (1) $T-, k$ between $\frac{8}{9}$ and 1.
- (2) $T+, k$ between $\frac{8}{9}$ and 0.
- (3) $T+, k$ between 0 and $-\infty$.

For cubics in divisions c' and d' , the real inflexional tangents overlap; the divisions that appear to correspond to the overlapping of the inflexional tangents determined by the triangles I., III., IV. are, in some order, $c + d, e, e'$. The line $S=0$ gives us the equianharmonic cubic; the line $T=0$ gives the harmonic cubics.

CHARLOTTE ANGAS SCOTT.

BRYN MAWR COLLEGE.

ON THE CAUSTIC OF THE EPICYCLOID.

THE theory of the caustic of a plane curve is given in works on either Geometry or Optics. See Salmon's *Higher Plane Curves*, or Heath's *Geometrical Optics*. The Memoir by Cayley in the *Phil. Trans.*, Vol. 147 (1857), deals fully with the case when the curve is a circle, and with that only. Many of the results are given in Heath's book. A complete discussion of the caustic of the epicycloid or hypocycloid would no doubt be interesting. I am here only concerned with those caustics by reflexion which are themselves cycloidal. There will appear to be, with this great limitation, only three cases:

- (i) when parallel rays are reflected at a hypocycloid of class 3,
- (ii) when rays parallel to an axis are reflected at a cycloid,
- (iii) when rays from the cusp of a cardioid are reflected at the curve.

These three cases will be considered in order.

- (i) The equations of an epicycloid in circular coordinates are (see an article in a forthcoming *American Journal*)

$$\begin{aligned}(p+q)x/c &= pt^q + qt^p, \\ (p+q)y/c &= pt^{-q} + qt^{-p},\end{aligned}$$

and the tangent at t is

$$x + yt^{p+q} = c(t^p + t^q) \dots\dots\dots(1)$$

Here

- a = radius of cusp circle,
- b = radius of moving circle,
- c = radius of vertex circle,

and

$$\begin{aligned}b/q &= a/(p-q) \\ &= c/(p+q).\end{aligned}$$

Let α be the inclination of parallel incident rays,

$\theta \equiv$ inclination of tangent,

$\phi \equiv$ „ „ reflected ray.

Then $\phi - \theta = \theta - \alpha$,

or $2\theta = \phi + \alpha$,

and $e^{2i\theta} = -t^{p+q}$;

$$\therefore e^{2i\phi} = t^{2(p+q)} \cdot k,$$

where $k = e^{-2i\alpha}$.

Hence the equation of the reflected ray is

$$(p+q)x/c - pt^q - qt^p \\ = kt^{2(p+q)} \{(p+q)y/c - pt^{-q} - qt^{-p}\} \dots \dots (2).$$

Comparing (2) with (1) we see that the 5 terms in t , whose exponents are $2(p+q)$, $2p+q$, $p+2q$, p , q , must reduce to 3, namely $p_1 + q_1$, p_1 , q_1 .

Equating the pairs of exponents in (2) we have the alternatives:

$$p=0, q=0, p \pm q=0, 2p+q=0, p+2q=0,$$

$$p=\infty, q=\infty.$$

The case $p=0$ gives $b=-a$, and no motion is possible.

$$q=0 \text{ gives } b=0, \text{ a point.}$$

$$p+q=0 \text{ gives } c=0, b=-a/2, \text{ a line.}$$

$$p-q=0 \text{ gives } b=\infty, \text{ the involute of a circle.}$$

$$2p+q=0 \text{ gives } p=1, q=-2, b=-2a/3,$$

the hypocycloid of class 3.

$$p+2q=0 \text{ gives } p=2, q=-1, b=-a/3,$$

the same hypocycloid.

$$p=\infty \text{ gives } a=\infty, \text{ a cycloid.}$$

$$q=\infty \text{ is equivalent to } p=0.$$

In the case of the involute of the circle we must before making $b=\infty$ change the line from which we are measuring angles until it passes through the cusp. The equation of the tangent will become

$$x = ye^{2t} - 2ate^t,$$

and the tangent to the caustic will be

$$x - a(1 - t)e^t = ke^{4t}\{y - a(1 + t)e^{-t}\}.$$

Therefore the caustic is not an epicycloid, and is not considered now.

Thus the first case to consider is that when $p = 2$, $q = -1$.

The equation (2) becomes

$$x/c - 2t^{-1} + t^2 = k\{t^2y/c - 2t^3 + 1\},$$

$$\text{or} \quad t(x - kc) - t^3(ky - c) = 2c(1 - kt^4) \dots\dots\dots(3).$$

Comparing with

$$t_1x_1 + t_1^3y_1 = c_1(1 + t_1^4) \dots\dots\dots(4),$$

we see that *the caustic is a hypocycloid of class 4*.

The centre of the caustic is the point kc , c/k on the vertex circle.

Let β be the inclination of the line to a vertex. Then we write, in order to complete the comparison of the equations,

$$x - kc = x_1e^{i\beta},$$

$$y - c/k = y_1e^{-i\beta};$$

$$\text{and} \quad \therefore tx_1e^{i\beta} - kt^3y_1e^{-i\beta} = 2c(1 - kt^4),$$

which is identified with (4) if

$$c_1 = 2c,$$

$$-kt^2e^{-2i\beta} = t_1^2,$$

$$-kt^4 = t_1^4,$$

$$\text{so that} \quad k^2e^{-4i\beta} = -k,$$

$$\text{or} \quad e^{-2i\alpha-4i\beta} = -1,$$

$$\text{or} \quad \beta + \alpha/2 = \pi/4.$$

Hence the inclination of a cusp tangent of the caustic is $\beta \pm \pi/4$, i.e. $-\alpha/2$ or $\pi/2 - \alpha/2$.

Now if a tangent to the original hypocycloid passes through ck , c/k , we have

$$tkc + t^2c/k = c(1 + t^3),$$

$$\text{whence} \quad t^2 = k \text{ or } t = 1/k,$$

so that since the inclination of the tangent is given by $e^{2i\theta} = -t$,

$$\begin{aligned} \text{we have (1)} \quad e^{2i\theta} &= \pm \sqrt{k} \\ &= \pm e^{-i\alpha}, \end{aligned}$$

$$\therefore \theta = -\alpha/2 \text{ or } (\pi - \alpha)/2;$$

and (2)

$$e^{2i\theta} = -1/k$$

$$= -e^{2i\alpha},$$

$$\therefore \theta = \pi/2 + \alpha.$$

Hence the axes of the caustic are tangents to the curve, and the third tangent from the centre of the caustic is perpendicular to the incident rays.

To find the intersections of the curve and caustic, we have by differentiation of (3) after division by t ,

$$ky - c = c(t^{-3} + 3kt),$$

while for the curve

$$y = c(2t - t^{-2}).$$

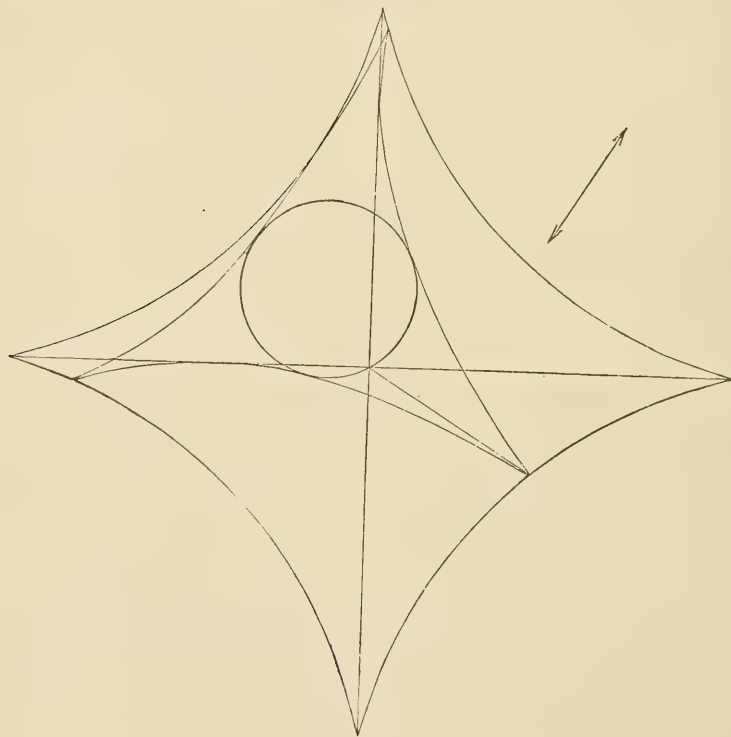
Hence for the intersections

$$k(2t - t^{-2}) - 1 = t^{-3} + 3kt,$$

or

$$k(t + t^{-2}) + 1 + t^{-3} = 0;$$

$$\therefore t^3 + 1 = 0, \text{ or } t = -1/k.$$



The values got from $t^2 + 1 = 0$ give the cusps of the curve, the value $-1/k$ is readily seen to give the point of contact of the tangent incident ray, where it is evident beforehand that the curves must touch. The figure shews the relation of the curve and caustic. It will be noticed that if the curves be rigid there is freedom of motion without violation of the relations.

(ii) Consider next the cycloid.

The coordinates of any point, referred to a cusp and a cusp-tangent, are

$$\begin{aligned}x &= a(1 + t - e^t), \\y &= a(1 - t - e^{-t}).\end{aligned}$$

These equations may be obtained from the equations of the epicycloid, by changing the origin and making $p = \infty$. But it is simpler to get them from the usual equations of a cycloid. It is understood that a is the radius of the rolling circle and that t is a pure imaginary.

The tangent is

$$x - 2a - at = e^t(y - 2a + at) \dots \dots \dots (5).$$

Hence with the same notation as before

$$\begin{aligned}e^{2i\theta} &= e^t, \\e^{2i\phi} &= ke^{2t},\end{aligned}$$

and the equation of the reflected ray is

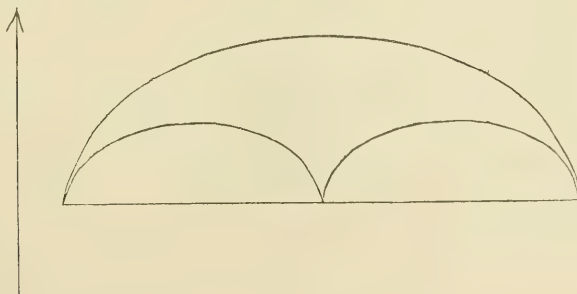
$$x - a(1 + t - e^t) = ke^{2t}\{y - a(1 - t - e^{-t})\}.$$

This is of the form (5) when $k = 1$. It then becomes

$$x - a - at = e^{2t}(y - a + at),$$

so that *the caustic is a cycloid of half the length*.

For a geometric proof see Curtis, Ed. Times Reprint, xli. p. 110.



(iii) When the light emerges from a point m, n at a finite distance we know that the caustic is the evolute of the locus of the image of the radiant point as to the tangent. (Dandelin. See Salmon, p. 99.)

The tangent is

$$x + yt^{p+q} = c(t^p + t^q).$$

The perpendicular line through m, n is

$$x - m - t^{p+q}(y - n) = 0.$$

At the intersection

$$2x_1 - m = c(t^p + t^q) - nt^{p+q}.$$

For the image of m, n

$$x + m = 2x_1, \quad y + n = 2y_1,$$

so that

$$x = c(t^p + t^q) - nt^{p+q} \dots \dots \dots (6).$$

Any involute of the caustic (supposed an epicycloid) is a parallel of its evolute, which is an epicycloid. Hence its tangent is

$$x + yt^{p_1+q_1} = c_1(t^{p_1} + t^{q_1}) + kt^{(p_1+q_1)/2},$$

whence

$$(p_1 + q_1)x = c_1(p_1 t^{q_1} + q_1 t^{p_1}) + k \frac{p_1 + q_1}{2} t^{(p_1+q_1)/2} \dots \dots (7).$$

This must be identified with (6). Hence $p, q, p + q$ must be equal in some order to $p_1, q_1, (p_1 + q_1)/2$.

Hence (1) $p = 2q$, (2) $2p = q$, (3) $p + q = 0$. The third case is nugatory; the others give the cardioid.

Taking $p = 2, q = 1$, we have $p_1 = 3, q_1 = 1$, so that the caustic is an epicycloid of class 4.

We must now complete the identification of (6) and (7); having identified the forms, we must identify the coefficients. The origin and zero direction of (7) being supposed different from those in (6), we have

$$4(\alpha x - m_1) = c_1(3t_1 + t_1^3) + 2kt_1^2,$$

$$4(y/\alpha - n_1) = c_1(3t_1^{-1} + t_1^{-3}) + 2kt_1^{-2},$$

identical with

$$x = c(t^2 + t) - nt^3,$$

$$y = c(t^{-2} + t^{-1}) - mt^{-3},$$

α being a new directional quantity, and m_1, n_1 the coordinates of the centre of (7). Omitting some evident steps we get

$$\alpha = 1, m_1 = n_1 = 0, m = n = -c/3 = -c_1/4.$$

Hence the radiant point is the cusp of the cardioid, and putting $k = 0$ in (7) the caustic is the evolute of

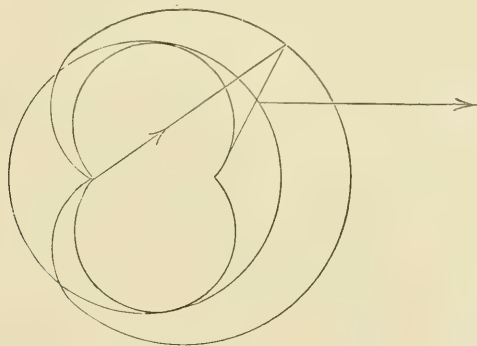
$$4x = c_1 (3t + t^3), 4y = c_1 (3t^{-1} + t^{-3}),$$

or
$$3x = c (3t + t^3), 3y = c (3t^{-1} + t^{-3}).$$

The evolute of an epicycloid has its vertices at the cusps. In the curve just written the vertices are at a distance $4c/3$ along the axis, and the cusps at a distance $2c/3$ in the perpendicular direction. Hence the cusps of the evolute are at a distance $c/3$ along the axis.

Thus the only cycloidal caustic of a cycloidal curve as to a finite radiant point is that of a cardioid as to the cusp. *The caustic is then a concentric epicycloid of class 4, with a cusp at the radiant point.*

For a geometric proof see Curtis, *Messenger of Math.*, xii. p. 33. The theorem seems to have been first proposed by Prof. Adams.



Two remarks may be added. Dandelin's rule given above fails completely, as Prof. Cayley points out, for parallel rays. But it is not always convenient for a finite radiant point. In the case just discussed the caustic is a much more familiar curve than its involute, and the discussion of the latter would be really foreign to the problem. In our case the involute, being similar to the

pedal of the cardioid with regard to the cusp, is of the form

$$x^{-1/3} + y^{-1/3} + z^{-1/3} = 0,$$

and has a noticeable singularity at the cusp and at the circular points at infinity.

The caustic in (iii) turns out to be the same as that of a circle for parallel rays. Hence if such rays fall first on a circle externally and then on a concentric cardioid, whose axis is equal to the diameter of the circle, and is parallel to the rays, they are brought to a point. See Fig. iii. This is conceivably better than a parabolic mirror for small pencils of light, since both the circle and cardioid can be turned on a lathe.

FRANK MORLEY.

19 April, 1890.

SUN-SPOT OBSERVATIONS.

OBSERVER, H. V. GUMMERE.

Date, 1889	No. of New		Disapp. by Solar rot.		Reapp. by Solar rot.		Total Number		Faculae	Definition	Remarks
	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Spots	Groups		
mo. d. h.											
5 17 9	0	0	0	0	0	0	0	0	3	fine	
18 10	0	0	0	0	0	0	0	0	1	poor	
21 10	0	0	0	0	0	0	0	0	0	poor	
22 9	0	0	0	0	0	0	0	0	1	good	
23 10	0	0	0	0	0	0	0	0	1	fine	
25 10	0	0	0	0	0	0	0	0	5	fine	
28 11	0	0	0	0	0	0	0	0	3	fine	
29 11	0	0	0	0	0	0	0	0	0	bad	
30 11	0	0	0	0	0	0	0	0	1	fine	
6 3 11	0	0	0	0	0	0	0	0	1	poor	
4 11	0	0	0	0	0	0	0	0	0	poor	
5 10	0	0	0	0	0	0	0	0	0	poor	clouds
6 9	0	0	0	0	0	0	0	0	0	good	
7 11	0	0	0	0	0	0	0	0	0	fine	
8 11	0	0	0	0	0	0	0	0	...	good	clouds
10 11	0	0	0	0	0	0	0	0	0	good	
11 11	0	0	0	0	0	0	0	0	0	poor	
13 4	0	0	0	0	0	0	0	0	5	fine	
15 4	0	0	0	0	0	0	0	0	1	poor	
17 10	1	10	0	0	0	0	1	10	4	good	
18 9	0	4	0	0	0	0	1	14	2	poor	
20 11	0	6	0	0	0	0	1	20	1	poor	
22 10	0	0	0	0	0	0	1	15	0	poor	
27 10	0	0	0	0	0	0	1	2	1	bad	
29 12	1	2	1	2	0	0	1	2	10	good	

OBSERVER, F. P. LEAVENWORTH.

6 14 4	0	0	0	0	0	0	0	0	...	good	
16 5	1	9	0	0	0	0	1	9	...	fine	
18 4	0	3	0	0	0	0	1	12	...	poor	
20 11	0	4	0	0	0	0	1	16	4	good	
21 3	0	9	0	0	0	0	1	25	...	good	1 large spot
22 4	0	1	0	0	0	0	1	26	...	good	
23 11	0	0	0	0	0	0	1	12	...	poor	
27 12	0	0	0	0	0	0	1	2	...	bad	1 large spot
28 12	0	0	1	2	0	0	0	0	...	bad	cloudy
29 11	1	2	0	0	0	0	1	2	3	good	spots small
7 3 3	0	2	0	0	0	0	1	4	...	poor	cloudy
5 12	0	0	0	0	0	0	1	1	..	poor	spot small
6 1	0	0	0	0	0	0	0	0	...	poor	
8 12	0	0	0	0	0	0	0	0	...	poor	
11 3	1	2	0	0	0	0	1	2	...	good	
12 1	1	8	0	0	1	3	2	10	...	good	1 large spot
14 5	0	7	0	0	0	0	2	17	...	good	

Date, 1889		No. of New		Disapp. by Solar rot.		Reapp. by Solar rot.		Total Number		Faculae	Definition	Remarks
		Groups	Spots	Groups	Spots	Groups	Spots	Groups	Spots	Groups		
mo. d. h.												
7	15 12	0	0	0	0	0	0	2	11	...	good	
	16 11	0	0	0	0	0	0	2	11	...	good	
	17 12	0	0	0	0	0	0	2	10	...	good	
	18 10	0	0	0	0	0	0	2	22	...	good	
	20 10	0	0	1	5	0	0	1	17	...	poor	
	22 10	0	0	0	0	0	0	1	2	...	poor	
	23 10	0	0	0	0	0	0	1	1	...	good	
	24 10	0	0	0	0	0	0	1	1	...	good	
	25 10	1	1	1	1	0	0	1	1	...	good	small spot
	29 11	1	21	0	0	0	0	2	22	...	good	all small
	30 10	0	0	0	0	0	0	2	22	...	good	
	31 3	0	2	1	1	0	0	1	23	...	poor	
8	1 11	0	0	0	0	0	0	1	22	...	poor	
	2 10	1	6	0	0	0	0	2	26	...	fair	
	3 10	0	9	0	0	0	0	2	35	...	good	
	4 3	0	0	1	11	0	0	1	21	...	poor	
	5 3	0	0	0	0	0	0	1	24	...	poor	2 large spots
	6 9	0	2	0	0	0	0	1	26	...	good	
	7 10	0	24	0	0	0	0	1	50	...	good	
	8 9	1	1	0	0	1	1	2	24	...	good	4 large spots
	10 1	1	3	0	0	0	0	3	20	...	poor	
	11 9	0	4	0	0	0	0	3	26	...	good	
	12 10	0	0	1	4	0	0	2	9	...	poor	2 large spots
	13 10	0	4	0	0	0	0	2	30	...	good	4 large spots
	14 11	0	0	0	0	0	0	2	12	...	good	
	15 1	0	0	0	0	0	0	2	14	...	good	
	16 9	0	0	0	0	0	0	2	12	...	good	3 large spots
	17 11	0	0	0	0	0	0	2	6	...	good	
	18 9	0	0	1	5	0	0	1	1	...	good	1 large spot
	19 10	1	1	0	0	1	1	2	2	...	good	
	20 10	0	0	0	0	0	0	1	1	...	good	
	21 9	1	1	1	1	0	0	1	1	...	good	
	22 10	0	0	0	0	0	0	0	0	...	poor	
	23 9	0	0	0	0	0	0	0	0	...	poor	
	24 10	0	0	0	0	0	0	0	0	...	good	
	25 4	0	0	0	0	0	0	0	0	...	good	
	26 11	1	1	0	0	1	1	1	1	...	poor	1 large spot
9	9 10	0	0	0	0	0	0	0	0	...	poor	
	14 10	0	0	0	0	0	0	0	0	...	fair	
	16 10	0	0	0	0	0	0	0	0	...	fair	
	17 10	0	0	0	0	0	0	0	0	...	poor	
	18 10	0	0	0	0	0	0	0	0	...	poor	
	19 9	0	0	0	0	0	0	0	0	...	poor	
	21 10	0	0	0	0	0	0	0	0	...	good	
	22 3	0	0	0	0	0	0	0	0	...	good	
	23 10	1	6	0	0	1	6	1	6	...	fair	1 large spot
	26 11	0	0	0	0	0	0	1	6	...	poor	
	27 9	0	6	0	0	0	0	1	12	...	fair	
	28 10	0	3	0	0	0	0	1	15	...	good	
	29 9	0	0	0	0	0	0	1	7	...	good	
	30 10	0	0	0	0	0	0	1	6	...	poor	
10	1 10	0	0	0	0	0	0	1	5	...	poor	
	2 9	0	0	0	0	0	0	1	14	...	good	
	3 12	0	0	0	0	0	0	1	4	...	good	
	4 12	0	0	0	0	0	0	1	1	...	poor	
	5 12	0	0	1	1	0	0	0	0	...	poor	
	7 10	0	0	0	0	0	0	0	0	...	poor	

Date, 1889	No. of New		Disapp. by Solar rot.		Reapp. by Solar rot.		Total Number		Faculae	Definition	Remarks
	Groups	Spots	Groups	Spots	Groups	Spots	Groups	Spots			
mo. d. h.											
10 8 10	0	0	0	0	0	0	0	0	...	poor	
9 10	1	4	0	0	0	0	1	4	...	good	spots small
10 11	0	4	0	0	0	0	1	8	...	good	
11 11	0	0	0	0	0	0	0	0	...	poor	cloudy
12 10	0	0	0	0	0	0	0	0	...	good	
15 3	0	0	0	0	0	0	0	0	...	poor	cloudy
16 10	1	5	0	0	0	0	1	5	...	poor	spots small
17 10	0	7	0	0	0	0	1	12	...	good	
18 10	0	0	0	10	0	0	1	2	...	good	
19 10	0	0	1	2	0	0	0	0	...	good	
20 9	0	0	0	0	0	0	0	0	...	good	
21 10	0	0	0	0	0	0	0	0	...	poor	
22 10	0	0	0	0	0	0	0	0	...	poor	
24 10	0	0	0	0	0	0	0	0	...	poor	
30 11	0	0	0	0	0	0	0	0	...	poor	
11 1 10	0	0	0	0	0	0	0	0	0	poor	
3 5	0	0	0	0	0	0	0	0	0	poor	
4 12	0	0	0	0	0	0	0	0	1	good	
5 9	0	0	0	0	0	0	0	0	1	good	
6 9	0	0	0	0	0	0	0	0	1	good	
7 9	0	0	0	0	0	0	0	0	0	good	
10 10	0	0	0	0	0	0	0	0	0	good	
12 9	0	0	0	0	0	0	0	0	2	good	
14 9	1	1	0	0	0	0	1	1	1	good	spot small
15 10	0	0	0	0	0	0	1	1	1	good	
16 10	0	0	0	0	0	0	0	0	0	poor	
22 10	0	0	0	0	0	0	0	0	1	good	
23 10	0	0	0	0	0	0	0	0	1	good	
24 10	0	0	0	0	0	0	0	0	0	good	
26 10	0	0	0	0	0	0	0	0	0	poor	
28 10	2	4	0	0	0	0	2	4	4	good	spots small
29 9	1	1	1	2	0	0	2	2	5	good	
12 1 12	0	0	0	0	0	0	0	0	7	good	
2 10	0	0	0	0	0	0	0	0	0	poor	
4 11	0	0	0	0	0	0	0	0	0	poor	
12 3	1	1	0	0	0	0	1	1	...	good	
13 11	0	0	1	1	0	0	0	0	...	good	
16 9	0	0	0	0	0	0	0	0	1	poor	
19 9	2	9	0	0	0	0	2	9	1	poor	spots small
21 10	1	28	0	0	0	0	3	37	4	good	spots small
23 12	0	0	0	0	0	0	1	1	4	good	
24 12	0	5	0	0	0	0	1	6	1	fair	
25 11	0	14	0	0	0	0	1	20	0	fair	1 large spot
26 11	0	0	0	0	1	1	1	13	0	poor	
27 11	1	10	0	0	0	0	2	23	...	good	2 large spots
28 11	0	0	0	0	0	0	2	21	...	good	large spot has white mark in umbra
31 11	0	0	0	0	0	0	1	1	...	poor	
1890											
1 3 11	0	0	0	0	0	0	1	1	...	poor	
4 11	0	0	0	0	0	0	1	1	...	poor	
6 11	0	0	0	0	0	0	1	1	...	bad	cloudy
8 11	0	3	0	0	0	0	1	3	1	poor	
9 10	1	2	1	3	0	0	1	2	...	bad	
11 3	0	0	0	0	0	0	0	0	2	fair	

OBSERVATIONS OF COMETS.

COMET *e* 1888 (1889 I.).

1889—90 Haverford M. T.				★	No. Comp.	Comet - ★		Comet's apparent		log <i>p</i> Δ		Obs.
mo.	d.	h.	m.	s.		Δα	Δδ	α	δ	for α	for δ	
6	6	14	17	55	1	9	m. s.	h. m. s.	° ' "	s.	"	L.
27	12	50	4		2	6	-1 39.72	22 45 14.96	+ 2 39 42.6	n 9.546	0.727	L.
7	4	11	49	55	3	7	+3 56.46	...	...	...	...	L.
6	12	56	22		4	16.5	-0 35.31	21 31 25.13	+ 0 56 49.1	n 9.481	0.746	L.
27	11	28	54		5	7	+0 40.17	21 24 24.57	+ 0 41 28.1	n 9.224	0.747	L.
9	27	8	10	28	6	10.3	-1 2.10	...	...	...	...	L.
28	7	38	11		6	20.6	+0 33.02	18 16 57.22	-10 24 47.4	9.425	0.817	L.
							+0 8.64	18 16 32.84	-10 28 38.9	9.341	0.723	L.

COMET *c* 1889.

6	27	13	59	48	7	5	-0 58.06	- 0 30.7	1 39 0.01	+40 59 7.5	n 9.768	0.527	L.
7	5	13	15	54	8	1	-2 23.0	- 3 2	...	...	...	...	L.
5	13	15	54		9	1	-2 35.7	- 1 18	...	...	...	...	L.

COMET *d* 1889 (BROOKS).

10	15	9	12	28	10	22.6	-0 39.43	- 0 5.4	23 41 22.17	- 4 8 56.5	n 8.995	0.787	L.
11	14	10	4	7	11	16.4	-1 57.33	+ 5 56.8	23 47 15.14	- 0 47 41.1	9.334	0.759	L.
16	9	2	9		12	20.4	-0 35.81	- 0 48.9	23 48 32.17	- 0 31 2.4	9.059	0.757	H.
23	8	30	17		13	11.7	-0 24.15	+ 3 38.2	23 53 57.15	+ 0 32 12.3	8.886	0.748	H.
1	13	8	53	33	14	6,...	+1 21.76	...	0 58 39.55	...	9.560	...	L.
13	8	53	33		15	6.4	+0 51.32	- 4 35.0	0 58 38.97	+ 9 26 27.7	9.560	0.690	L.
17	8	2	4		16	6,...	-0 5.43	...	...	...	...	...	H.
17	9	22	16		17	...,4	...	- 3 16.6	...	...	...	...	H.
22	8	33	18		18	5	-0 19.24	- 3 8.6	1 15 7.71	+11 17 48.4	9.560	...	L.

MEAN PLACES FOR 1889,0 AND 1890,0 OF COMPARISON STARS.

★	α	Red. to app. place	δ	Red. to app. place	Authority
	h. m. s.	s.	° ' "	"	
1	22 46 54.28	+0.40	+ 2 57 47.0	- 0.5	Schjellerup 9372
3	21 31 58.86	+1.58	+ 0 46 0.9	+ 6.0	Lamont 8424
4	21 23 42.75	+1.65	+ 0 39 25.3	+ 6.3	Lamont 8325
6	18 16 22.96	+1.24	-10 22 40.9	+ 8.9	Lamont 2380
7	1 39 57.94	+0.13	+40 59 48.5	-10.3	Weisse's Bessel 871
10	23 41 59.17	+2.43	- 4 9 6.6	+15.5	Lalande 466.12
11	23 49 10.22	+2.25	- 0 53 52.9	+15.0	Yarnall (F) 108.47
12	23 49 5.75	+2.23	- 0 30 28.4	+14.9	Valentiner
13	23 59 19.11	+2.19	+ 0 28 19.5	+14.6	Lamont 9372
14	0 57 18.86	-1.07	...	...	Yarnall (F) 546
15	0 57 48.72	-1.07	+ 9 31 8.3	- 5.6	Yarnall (F) 556
18	1 15 28.03	-1.08	+11 21 2.4	- 5.4	Yarnall (F) 680

NOTE. In column Obs.

L = F. P. Leavenworth,
H = D. P. Hibberd.

ON A NEW MS. OF THE FOUR GOSPELS,

BY

W. C. BRAITHWAITE.

[THE following communication will be of interest to students of the New Testament and will furnish additional matter to the Catalogues of MSS. of the Gospels. We are much indebted to the writer for his communication and can assure him that every new worker in this field meets with a ready welcome.

J. R. HARRIS.]

312 CAMDEN ROAD, N,
31. XII. 1889.

DEAR FRIEND,

J. R. Harris,

Thou wilt like to hear of another Greek MS. containing the 4 Gospels which my father has recently obtained from Athens. It is a thick squarish book made up of leaves of vellum or parchment $6\frac{1}{2}$ inches high by $4\frac{3}{8}$ broad. The writing on these is about 4 inches high by 3 inches broad in an upright small cursive character, the letters being hung from the lines ruled by the copyist's style. There are usually 20 lines to a page, corresponding to about 7 verses in our A. V. The back cover and some of the last leaves are lost:—the 471 pp. containing the text go to Jno. ix. 38.

The Church Lessons are marked but there is no harmony in the margin, nor indeed any marginal lettering except the capitals belonging to the body of the text. There are several pp. of matter at the beginning containing I think a harmony of the

Gospels and a table of Church Lessons. Between the Gospels the κεφαλαια are put and also the verses (of the Paphlagonian philosopher as it would seem from the MS.) which are in part given in your Notes on Scrivener, p. 25. The red ink has faded and it is not easy to make these out. The MS. must also have contained Theophylact's prefaces (as given in Erasmus's Greek Testament, 2nd ed.) as those to the Gospel of Mark and John are in it now.

The original text is correctly written except for occasional itacisms and omissions by homoio-teleuton. It is of course mainly what Drs Westcott and Hort call Syrian. I have made a careful collation of it from which I extract the following

- Matt. iv. 10 + ὀπισω μου after ὑπαγε.
 v. 27 — τοις αρχαιοις.
 32 πας ὁ ἀπολων. for ὃς ἀν ἀπολυση.
 47 φίλους for ἀδελφους.
 vii. 2 μετρηθησεται for ἀντιμετ:
 viii. 5 marginal addition by late hand, και ὑποστρεψας
 ὁ ἑκατονταρχος εἰς τον οἶκον αὐτου ἐν αὐτῇ τη
 ὥρᾳ εὔρε τον παιδα αὐτου ὑγιαινοντα.
 x. 8 — νεκρους ἐγειρετε.
 xiv. 19 — τους ἄρτους.
 xviii. 28 εἴ τι for ὅ τι.
 xxi. 1 Βηθσφαγη.
 xxiii. v. 14 inserted before v. 13.
 21 κατοικησαντι for κατοικουντι.
 25 + του πινακος after παροψιδος.
 ἀδικιας for ἀκρασιας.
 26 το ἐσωθεν for το ἐντος.
 xxiv. (I give the entire collation of this chapter.)
 2 — μη.
 3 ὕμιν for ἡμιν.
 4 πλανησει for πλανηση.
 6 μελλησεται for μελλησετε.
 9 — των before ἐθνων.
 18 το ἱματιον for τα ἱματια.
 20 — ἐν before σαββατω.
 27 — και before ἡ παρουσια.
 33 ταυτα παντα for π : τ.

- 36 — της before ώρας.
— μου after πατηρ.
- 43 γινωσκεται for γινωσκετε.
- 45 οϊκετιας for θεραπειας.
- 47 αυτον υπαρχ. for υ: αυ.
- 49 εσθιη for εσθιειν.
πινη for πινειν.
- xxv. 29 reads at end:
και ο δοκι εχει αρθησεται απ' αυτου
(i.e. ο δοκει εχειν).
- xxvi. 26 ευχαριστησας και ευλογησας.
- 40 + και αναστας απο της προσευχης before και
ερχεται κ.τ.λ.
αυτοις for τω Πετρω.
- 71 λεγει αυτοις· εκει και ουτος κ.τ.λ. for λεγει τοις
εκει· και ουτος κ.τ.λ.
- 74 καταθεματιζειν for καταναθ—.
- xxvii. (I give the entire collation of this chapter.)
- 2 — αυτον before Ποντιφ.
- 6 κορβοναν for κορβαναν.
- 11 — και επηρωτησεν το λεγων but added in margin
by later hand.
- 15 ειωθη for ειωθει.
- 18 — ηδει γαρ οτι το αυτον added in margin by
later hand.
- 20 αιτησονται for αιτησωνται.
- 23 — λεγοντες.
- 25 τα τεκνα υμων for τ. τ. ημων.
- 33 ο εστι for ος εστι λεγομενος.
- 35 — ινα πληρωθη to end of v. 35.
- 38 after v. 38, Luke xxiii. 39—43 is inserted entire.
- 41 — δε after ομοιως.
+ και φαρισαιων after πρεσβυτερων.
- 42 + επ' before αυτω.
- 43 — νυν.
- 44 ονειδιζον αυτον for ωνειδιζον αυτω.
- 45 ενατης.
- 46 ενατην.
λειμα for λαμα.
- 49 σωσον for σωσων.

- 51 *άνω* for *άνωθεν*.
 52 *άνεωχθη* for *άνεωχθησαν*.
 55 — *άπο* before *μακροθεν*.
ήκολουθουν for *ήκολουθησαν*.
 64 — *νυκτος*.
 65 — *δε* after *έφη*.
 Mark i. 16 + *του Σιμωνος* after *αυτου*.
 ii. 16 + *ο διδασκαλος υμων* after *πινει*.
 26 — *του* before *αρχιερεως*.
 iii. 13 — *και αναβαινει εις το ορος* added in margin by later hand.
 28 *λαλησωσιν* for *βλασφημησωσιν*.
 ix. 3 after *εμπροσθεν αυτων* a later hand adds in margin *και ελαμψε το προσωπον αυτου ως ο ήλιος*.
 12 *καθως* for *και πως*.
 x. 20 + at end *τι έτι υστερω*.
 21 + *ει θελης τελειος ειναι*.
before εν σοι υστερει.
 — *Ιησους*.
 — *τοις* before *πτωχοις*.
 24 — *τεκνα*.
 — *τοις* after *επι*.
 34 — *και μαστιγωσουσιν αυτον και εμπτυσουσιν αυτω*, but added by later hand in margin.
 xi. 24 at end a later hand adds in margin *λεγω δε υμιν*, then follows Matt. vii., 7, 8.
 xii. 21 — *και απεθανε*.
 26 *του βατου* for *της βατου*.
 32 — *Θεος*.
 xiv. 27 + *της ποιμνης* after *προβατα*.
 40 *καταβαρυνομενοι* for *βεβαρημενοι*.
 xv. 3 — *αυτος δε ουδεν απεκρινατο*.
 14 *περισσως* for *περισσοτεως*.
 18 *ο βασιλευς* for *βασιλευ*.
 34 *ο θεος ο θεος μου* for *ο θ. μ. ο θ. μ.*
 xvi. The last *vv.* in the MS. without any mark of suspicion.
 Luke i. 28 + at end *και ευλογημενος ο καρπος της κοιλιας σου*.

- 35 — εκ σου.
- ii. 20 ὑπεστρεψαν for ἐπεστρεψαν.
21 αὐτον for το παιδιον.
- iii. 2 ἐπι ἀρχιερεως for ἐπ ἀρχιερων.
10, 12, 14 ποιησωμεν for ποιησομεν.
33 after Σαλμων the text goes on to του Φαρες.
The correction in margin inserts του ναασσων του ἀμιναδαβ του ἀραμ του ἰωραμ του ἑσρων.
- iv. 32 — ὅτι ἐν ἐξουσια ἦν ὁ λογος αὐτοῦ, but the words are interlined in red ink.
- vi. 23 ψευδοπροφηταις for προφηταις.
- viii. 13 + at end ταυτα λεγων ἐφωνει ὁ ἐχων ὦτα ἀκουειν ἀκουετω.
24 — ἐπιστατα 2°.
- ix. 28 — και Ἰακωβον.
- x. 21 after σου + και στραφεις προς τους μαθητας εἶπε.
- xi. 9 — κρουετε και ἀνοιγησεται ὑμιν.
53, 54 — περι πλειονων, ἐνεδρεουντες αὐτον και.
- xii. 21 at end add ταυτα λεγων ἐφωνει ὁ ἐχων ὦτα ἀκουειν ἀκουετω.
- xiv. 24 at end add πολλοι γαρ εἰσι κλητοι ὀλιγοι δε ἐκλεκτοι.
35 — ἐξω βαλλουσιν αὐτω.
- xvii. 36 omit this verse.
- xxii. 30 — ἐν τη βασιλειᾳ μου.
- John i. 28 Βηθανιᾳ for βηθαβαρα.
vi. 10 οἱ ἀνθρωποι· ἀνδρες for οἱ ἀνδρες.
vii. 32 + ὑπηρετας after ἀπεστείλεν.
viii. (I give the full collation of this Chapter to v. 20.)
1 προς το ὄρος for εἰς το ὄρος.
2 + και before παλιν.
ὄχλος for λαος.
ἤρχεται for ἤρχετο.
after αὐτους add in body of text ἐν τισιν ἀντι-
γραφοις οὕτως.
3 ἐπι μοιχειᾳ for ἐν μ.
+ τῷ before μεσῶ.
εἶπον for λεγουσιν.
4 εἰληπται for κατειληφθη.

- ἐπαυτοφορῶ for ἐπαυτοφωρῶ.
 5 ἡμιν Μωσῆς for Μ ἡ.
 λιθαζειν for λιθοβολεισθαι.
 + περι αὐτῆς after λεγεις.
 6 σχῶσι for ἐχῶσι.
 κατηγοριαν for κατηγορειν.
 κατ αὐτου for αὐτου.
 — μη προσποιουμενος.
 7 ἀνεκνυφε for ἀνακνυφας.
 + και before εἶπε.
 αὐτοις προς αὐτους.
 ἐπ αὐτῇ του λιθον for τον λ. ἐ. αὐ.
 9 — και ὑπο της συνειδησεως ἐλεγχομενοι.
 κατεληφθη for κατελειφθη.
 — μονος.
 οὔσα for ἐστῶσα.
 10 γυναι for ἡ γυνη.
 — ἐκεινοι.
 11 ὁ δε Ἰησους εἶπεν αὐτῇ for εἶπε δε α. ὁ Ἰ.
 + ἀπο του νυν after και.
 12 αὐτοις ὁ Ἰησους for ὁ Ἰ. α.
 περιπατηση for περιπατησει.
 14 ἦλθον for ἐρχομαι.
 19 — ὁ before Ἰησους.
 20 ἐληλυθη for ἐληλυθει.
 The MS. ends at προσε[κυνησεν] in Jno. ix., 38.

The extracts will probably be enough to shew thee the general character of the MS.

I have also now made a collation of the other MS. my father got at Athens in 1884¹. It contains all the Gospels, but a few pages here and there are lost. In spite of bad writing and spelling there are some good readings, e.g.

Mark i 34 + τον Χριστον εἶναι.

With best wishes for the New Year,

I am affectionately thy friend,

WM. C. BRAITHWAITE.

¹ Cod. Evv 573 in Gregory's Catalogue.

A CATALOGUE OF MANUSCRIPTS

(CHIEFLY ORIENTAL)

IN THE LIBRARY OF HAVERFORD COLLEGE.

BY

ROBERT W. ROGERS.

NOTE.

THE following collection is composed chiefly of MSS. purchased by me in Egypt, Palestine, and the Lebanon; and they are a gift to the Library of Haverford College by my friend Walter Wood and myself, in the hope that they may become the nucleus of a more extended collection, and may furnish a stimulus to the study both of ancient documents in general, and of the Semitic languages in particular. I have not thought it worth while to go into a detailed account of the methods by which this little handful of books was acquired, though there is no doubt that such a record would illuminate many passages in the Hebrew Scripture and Oriental literature, from the time when Abraham purchased the field of Mamre onwards. Moreover, we have a high example for the less detailed description of the local origins of books in the writings of the late Dr Tischendorf, whose prizes were usually found 'in the dust of an Eastern Monastery'; so I will simply say that these MSS., trifling collection though they be, have had their share of the dust of Holy Lands and Holy Cities, but that their sanctity is locally anonymous; and I will only ask that those who may examine them will have the grace to believe that they were all acquired by the lawful, though sometimes tedious, processes of Oriental commerce. The Catalogue is due to the energy of my colleague, Professor Rogers.

J. RENDEL HARRIS.

HEBREW.

I.

MANUSCRIPT on very fine white vellum, size of leaves $9 \times 9\frac{1}{4}$ inches, written in a beautiful regular hand of the XIII Century. There are three columns on a page except in the Books of Psalms and Job, which have but two, each column containing 30 lines. The ink has become somewhat brown in color and in places has peeled off. The Parashas are indicated on the margins by exceedingly pretty illuminations with the number in the centre. The fly leaf is covered with a sort of checker pattern in colors, crossed and re-crossed, in the bounding lines of the squares, by Hebrew sentences in a fine script, the whole surrounded by a border containing an almost illegible Hebrew sentence taken from Ps. cxix. 105, 106. On the verso of the same leaf there is another illuminated pattern with a border containing similar sentences. The book is beautifully bound in Oriental red leather, marked on the back:

כתר תורה

תנ"ך

The covers are stamped with a representation of Jerusalem, with the following words in the four corners:

מקום — מקדשנו | ירושלם | פערק (?)

and around the whole picture are four sentences from Ps. xix. 8 *sq.* The Representation of Jerusalem we have noted as used on a printed title-page in a Hebrew book.

It contains the following books in the order given,

Genesis. Exodus. Leviticus. Numbers. Deuteronomy. Joshua. Judges. (I. and II. Samuel) the two books united without division. (I. and II. Kings.) Jeremiah. Ezekiel. Isaiah. Hosea. Joel. Amos. Obadiah. Jonah. Micah. Nahum. Habakkuk. Zephaniah. Haggai. Zechariah. Malachi. Ruth. Psalms. Job. Proverbs. Ecclesiastes. Canticles. Lamentations. Daniel. Esther. (Ezra. Nehemiah.) I. and II. Chronicles.

The manuscript is defective from

Gen. i. 30. אֶת־כָּל יֶרֶק עֵשֶׂב לְאֹכְלָהּ וַיְהִי

to Gen. vi. 20. שָׁנִים מִכָּל יָבֹאוּ אֵלֶיךָ

At the end of Isaiah the following words have been carried into the text :

והיה

מריחדש יתקן סימן

At the end of the book stands the following subscription :

אני שלמה בן משה אֵל כתבתי ומסרתי
 ספרי ארבעה ועשרים אלו ליקר המשביל
 ויהושוע בן היקר הנכבדו זרחיה בן
 כבוד החכם הישישו שאלתיאל יצו
 המקום יזבחו (sic.) להגות בהם הוא זרעו
 זרע זרעו עד סוף כל הדורות
 ויקיים בהם מקרא שכתוב לא
 ימוש ספר התורה הזה מפיו והגית
 בו יומם ולילה למען תשמר לעשות
 בכל הכתוב בר כי אז תצליח את דרכך
 ואז תשביל : וסיימתים וחדש אדר

שנת חמשת אלפים ועשרים ושש
לבריאת עולם :

This gives the date 5026, which is equivalent to 1266 A.D. It may be doubted whether this hand is contemporary with the hand of the volume, but at any rate the manuscript can scarcely be of an inferior date.

The subscription is followed by six pages of bicolumnar writing enclosed in a window-like ornamentation, apparently containing various readings for the later books of the Bible, for it is headed

חלף הכתובים

The following is the first page :

Col. I.

דברי הימים אדם
ודיפת ותרשישה ורודני
פוט וכנען ומשד עיבל
משמע זקף
יאומר צפי זרח והומם עליו
שפי איהחמין יעקן המלכים
רביע וימתבלע פשט הרד
פעי לאבשלים הרביעי החמישי
בארץ יהודה נתני טפח ולבני
אחרן רביע אתחברון נרש
חילי וממטה בנימין רביע
ממשפחות המטה פזר ולבני
גרשים אזל ממטה יששכר
תלש

Col. II.

בני ישראל טפחא ויתנו
בנירל יקראו אתהן בשמו

עריגבולם ערי מקלט.
 עבר כל עם לבני
 קהת עשתרית. משל יריחו
 זרקא. קדם ובנבעון גרש. ו
 וקי שאחיו טפחא. שמאה
 חמה מריב. ומריב ותארע
 נרש. יהוערה רפה כלאלה
 נלחמו וינסנלבע אחרי שאול
 וימצאוהו ויחל טפחא. אל
 נשא יבאו אול. על החרב
 וימת. מתי סימן וידאו תלש.

(Hav. 1.)

II.

Roll of fine white vellum 17 inches in width and 73 feet long, composed of 44 skins. Contains the Pentateuch.

(Hav. 2.)

III.

Roll of fine vellum 10 inches in width and 75 feet long, composed of 43 skins. Contains the Pentateuch.

(Hav. 3.)

IV.

Roll of brown leather, 13 inches in width. Contains Lamentations.

(Hav. 4.)

V.

Roll of brown leather, 13 inches in width. Contains Ruth.

(Hav. 5.)

VI.

Roll of brown leather, 13 inches in width. Contains Esther. (Hav. 6.)

VII.

Roll of brown leather, 9 inches in width. Contains Canticles. (Hav. 7.)

VIII.

A single leaf of vellum from the Pentateuch with Targum and Commentary of Rashi. Contains Leviticus viii. 34—ix. 14. (Hav. 8.)

IX.

Remains of fine Hebrew manuscript, vellum, tri-columnar, with 28 lines to the column. It has the great and little Massorah and contains Numb. xxxiii. 38—xxxv. 28; Deut. iv. 1—v. 11, one double leaf. Deut. xxix. 24—xxxi. 28; xxxi. 28—xxxiii. 9, two adjacent leaves. Jos. ix. 7—x. 34; x. 34—xiii. 12, two adjacent leaves. (Hav. 9.)

X.

One double leaf of vellum manuscript. Two columns to the page, each with 25 lines. Contains 2 Kings xx. 19—xxii. 2 and 2 Kings xxv. 25 ad fin. The last page has a subscription to the whole book, which gives a date 1469 A.D. (Hav. 10.)

XI.

Double leaf of vellum manuscript. Contains on first leaf Jeremiah v. 19—vi. 1, in the Hebrew Text
H. IV. 3

and Targum of Jonathan in alternate sentences. The second leaf is almost illegible.

(Hav. 11.)

XII.

Single leaf of vellum manuscript. Contains part of Jeremiah xlviii, with Rabbinical Commentary.

(Hav. 12.)

XIII.

Manuscript on paper of unknown date. Size of page $8\frac{1}{2} \times 11$ inches. The paper is yellow with age, and the margins torn and broken, but the writing remains quite legible. Bound in brown leather. Contains Genesis and part of Exodus in a tri-lingual text, each sentence being given successively in three renderings: 1. The common Hebrew Text pointed. 2. The Targum of Onkelos pointed. 3. An Arabic version in Hebrew characters, which seems to be very similar to that given in Walton's Polyglot. This manuscript is said to have been brought from Yemen by the returned Jews, from whom Shapira acquired a number of books for the British Museum. The Arabic Version runs as follows:

אוול מא כלק אללה אלסמאואת ואלארין
 ואלארין כאנה' גאמרה מסתבחרה וצלאם עלי
 וגה אלגמר וריאח אללה תהב עלי וגה אלמא

The following subscription is found at the end of the manuscript:

אבגד הו חטי כך למם נן סעפף צין קרשת:
 את בש גר דק הין וף זע חס טן ים כל:

The first line is evidently the Hebrew Alphabet pointed, the second is the same alphabet written according to the method Athbash.

(Hav. 13.)

XIV.

Manuscript on paper of the same size and appearance as the preceding, and apparently a companion volume, but written for the most part in two columns. It begins with Leviticus i. 8 and continues to the end of Deuteronomy. Subscription at the end :

ברוך י"אל לעולם אמן ואמן

ימלוך י"אל לעולם אמן ואמן

(Hav. 14.)

XV.

Vellum manuscript of 36 leaves, each 3 × 4 inches, in fine script. The Oriental binding is made of paper covered with leather neatly stamped with simple ornamentation. It is well preserved except that a few leaves have had the margins partially destroyed, the writing however being unharmed.

פרקי אבות "Sayings of the Fathers," with a brief commentary written above and below the text. The initial word of each section is generally written in large script and with red ink. At the end of Perek 3 one leaf is missing, and at the end of Perek 4 two leaves. All the Peraḳim are numbered פרק ראשון, פרק שני etc., except Perek 6 which is called פרק אחר.

A collation of the text with that given by Taylor ("Sayings of the Jewish Fathers," by Charles Taylor, M.A., Cambridge, 1877) would seem to show that this manuscript is not the same as any cited by him. In several places it agrees with "University Addit. 470," where that manuscript stands entirely alone among those cited by Taylor. On the other hand it gives the common reading where the Cambridge manuscript is probably correct, e.g. in I. 7, this manuscript reads

נְתַאי, a degenerate form, instead of מְתַאי, and at the end of Perek 1 there is added :

שְׁנֵאמֶר : אֵמֶת וּמִשְׁפָּט שְׁלוֹם שְׁפָטוּ בְּשַׁעְרֵיכֶם

from Zech. viii. 16, probably a later addition. (Cf. Strack : "die Sprüche der Väter," Berlin, 1888, p. 24.) But in other places it has the true reading where the Cambridge manuscript has gone astray, e.g., in III. 21 it does not omit הָפָה יְתֵרָה נו'

(Hav. 15.)

XVI.

Vellum manuscript of the XIV Century of 256 leaves, each $6 \times 9\frac{1}{2}$ inches, 25 lines to the page, imperfect, but in fine preservation and vellum very white, contains portions of Maimonides הִיר הַחֻקָּה. The manuscript begins in the fourth book סֵפֶר נְאֻשִׁים which ends on fol. 97. Fol. 98 is blank and on fol. 99 begins book 5, סֵפֶר קִרְשָׁה which ends on fol. 193 followed by a blank leaf. Book 6 סֵפֶר הַפְּלֵאָה begins on fol. 195 verso, and is incomplete on fol. 256 where the manuscript ends.

(Hav. 16.)

XVII.

Vellum manuscript. Size of pages $6 \times 6\frac{1}{2}$ inches, 19 lines to the page. A commentary on Ezekiel, or the mystery of the Chariot. Title thus :

פִּירוּשׁ הַמְּרַכְבָּה שֶׁל יְחֻזְקָאֵל הַנָּבִי

(Hav. 17.)

XVIII.

Paper manuscript upon coarse paper in a late hand very carelessly written. $5\frac{1}{2} \times 8$ inches, 23 lines to the page. Contains a Rabbinical Treatise.

(Hav. 18.)

XIX.

Single leaf of a Rabbinical Text.

(Hav. 19.)

XX.

Single leaf of a Rabbinical Text.

(Hav. 20.)

XXI.

Paper manuscript with illuminated title-page and an illumination representing the golden candlestick of the sanctuary. Size of pages $7 \times 9\frac{1}{2}$ inches. The title is

ספר
מנורת המאור

It has the appearance of having been copied from a printed book, apparently printed at Amsterdam.

(Hav. 21.)

HEBRAEO-SAMARITANUS.

I.

Manuscript on fine vellum of XI Century (?), somewhat yellow with age, containing 219 leaves each $12 \times 15\frac{1}{2}$ inches. There is only one column on the page except in some poetical portions, which are bi-columnar. There are 33 lines to the page. The corners of the leaves are destroyed in places, and the loose leaves at the beginning and end are somewhat cracked and broken. In other respects the book is well preserved. Ink somewhat brown.

The book contains the Pentateuch in the common Hebraeo-Samaritan text. It is defective at the begin-

ning, the text being wanting up to Gen. iv. 14. The first leaf is however so much broken as to make its reading difficult. The second leaf begins with Gen. vi. 17 and from that point there are no lacunae and no defects. It ends incomplete at Deut. xxx. 18.

(Hav. 22.)

ETHIOPIC.

I.

Vellum manuscript containing 182 leaves, $12 \times 16\frac{1}{2}$ inches. Bound in original Oriental binding of boards, covered with leather stamped with various geometric designs and with crosses. Several hands may be traced in the writing. From fol. 1 to 127 the writing is large and handsome, in three columns, containing from 29 to 31 lines each, a few pages only being apparently written in another hand. The divisions between verses are in red, as are also certain verses which stand at the beginning of sections for liturgical purposes. At the beginning of the books, the first ten lines across the page are written in alternate pairs in red and black ink. From fol. 128 to fol. 134 the writing is somewhat smaller and not so neat, and contains 42 lines to the column. After these the large hand begins again and continues to 163. Fols. 164—169 are written in yet another hand, fine and neat, with 42 lines to the column. And from that to the end of the book the large hand is found again.

The vellum is in perfect preservation and the inks bright and clear.

Marginal notes, glosses and corrections in later hands are found in many places throughout the volume.

The contents of the Volume are as follows :

- a. Genesis. ለሬት: ዘልደት::
- b. (Fol. 42.) Exodus. ለሬት: ዘፀላት:: Subscription
 ለሬት: ዘፀላት: ተፈጸመ።
- c. (Fol. 75.) Leviticus. No title. Subscription
 ለሬት: ዘሌዋውያን: ተፈጸመ።
- d. (Fol. 100.) Numbers. ለሬት: ዘኑልቀኑ: Sub-
 scription ተፈጸመ: ዘኑልቀኑ:
- e. (Fol. 128.) Deuteronomy. ዘጸገዋ: Subscrip-
 tion ተፈጸመ: ዘጸገዋ:
- f. (Fol. 148.) Joshua. ዘሆሌእ: Subscription
 ሰዘጸሐፍ: ጦሰዘእጸሐፍ: ጦሰዘእን
 በበ: ጦሰዘተርጌዋ: ደጸሐፍ: ሰዋ
 ጦ: ኀበ: ዓዋደ: ጦርቅ: ኀበ: ዘሊይ
 ጣከን: ሰዓለጦ: ዓለዋ: እጭኒ::
- g. (Fol. 166 b.) Judges. ዘጦሳፋኒት: Subscription
 ተፈጸመ: ዘጦሳፋኒት:
- h. (Fol. 180.) Ruth. ዘረት:

The text of the manuscript does not accord closely with that published by Dillmann (Octateuchus Aethiopicus edidit Dr Augustus Dillmann. Lipsiae, MDCCCLIII) as the following variants in the first chapter of Genesis will show.

Verse 2. After ጤጤደርስ add ሀሰጦት: እጦትነት:
 ጤጢስተርሊ

Verse 4. After ወናደ add ጦእቱ

„ 8. After ወናይ add ጦእቱ

„ 9. For ጤጢስተርሊ read ጤጢስተርኪ

„ 12. After ዘደዘርእ read በበዘርኩ: ጦበበዘጦደ:
 ጦበበ: እርእይህ

- Verse 14. For ደጉኑ፡ ከርሃናት፡ read ለደጉኑ፡ ብርሃኑ፡
 „ „ For መለዋዕል read መዋዕል
 „ 17. For መለሊቲኒ read መለሌት
 „ 20. After እገዚእ-ብሔር read ታምፀእ፡ ጦድር፡
 ዘደትሐመለ፡ ጫራለ፡ ሐደመት፡ መጎዕዖ፡ ሳዋድ፡ ዘደለረ፡
 መልዕተ፡

Verse 21 sq. For በበዘመዱ and following read thus
 ዘበበ፡ ዘመዱ፡ እገዚአብሔር፡ ከጦ፡ ሠናድ፡ ጫንቱ፡ ጦኩሎ፡ የፋ፡
 ዛደለረ፡ በበ፡ ዘመዱ፡

the divergences in this verse are due doubtless to
 homoeoteleuton.

Verse 25. Omit እገዚእ-ብሔር

- „ 27. Add H before ተገዕተ፡
 „ 28. After ለጦድር add ለሱለ፡ ጦድር
 „ 29. For ኩሎ፡ ጦድር፡ read ሀሳፌ፡ ኩሎ
 „ „ For በዘርሎ read በበ፡ ዘርሎ፡
 „ „ For በፋሪሁ read በበ፡ ፋሪሁ፡

(Hav. 23.)

II.

Vellum manuscript containing 131 leaves $7\frac{1}{2} \times 7\frac{1}{2}$ inches. Bound in original Oriental binding of boards lined with blue and white cloth and covered with leather, stamped with various geometric designs and with crosses. The writing, which is uniform through the volume, is small and neat and is arranged in two columns of 19 lines each. The beginnings of sections and certain names, as ማርያም, are rubricated. The book is encased in a māḥdar, furnished with cover and straps to suspend it from the wall, or to hang about the neck of the possessor.

It contains Prayers and Hymns chiefly addressed to the Virgin Mary.

The following divisions are noted on the pages:
 HΛ⁷Λ, HΛΛ⁷Λ, HΛ⁷Λ⁷, HΛ⁷Λ⁷Λ, HΛ⁷Λ⁷Λ, HΛ⁷Λ⁷Λ⁷, HΛ⁷Λ⁷Λ⁷Λ⁷:

The leaves show marks of long use but the whole is well preserved.

This manuscript is the personal property of Walter Wood.

III.

Vellum manuscript containing 51 leaves, $5\frac{1}{4} \times 7$ inches. Bound in uncovered boards. The writing is small and neat and is uniform through the volume. There are two columns on the page, each containing 20 lines. The beginnings of sections and certain names, as *ΑΛΡΑ*, are rubricated throughout.

It contains Prayers and Hymns chiefly addressed to the Virgin Mary.

On fol. 1 a there are several trials of the pen, each beginning *ΑΛΡΑ*. On fol. 2 b there is a rude drawing of the Trinity (?) in the form of three heads, and on fol. 51 a there is another rude drawing, apparently of the Virgin, with outstretched hands.

(Hav. 24.)

IV.

Vellum manuscript containing 71 leaves, $4\frac{3}{4} \times 6\frac{3}{4}$ inches. Bound in heavy leather. The writing is mostly large and beautiful but is not uniform through the volume. There are 13 lines to the page. The beginnings of sections and certain names, as *ΑΛΡΑ*, are rubricated.

It contains Prayers.

On fol. 1 a there are some trials of the pen as in III.

(Hav. 25.)

V.

Vellum manuscript containing 89 leaves, 4×6 inches. Bound in uncovered boards. At least four hands may be distinguished in the writing, which varies from a large early hand to a small careless and rather late hand.

It is rubricated and contains trials of the pen similar to the preceding manuscript.

It is a book of Prayers.

(Hav. 26.)

VI.

Vellum manuscript containing 75 leaves $3\frac{1}{4} \times 3\frac{1}{2}$ inches. Bound in uncovered boards. Defective at the end, with one cover missing. Rubricated as the former, and with similar contents.

(Hav. 26.)

SYRIAC.

I.

Manuscript on paper much worm-eaten, size of leaves 7×11 inches, written in the Malkite character. There are two columns on the page, each containing 22 lines.

Prefixed to the manuscript proper are ten pages, divided into squares with curiously illuminated borders, each square containing in colored inks (red, yellow and black) directions for the lesson to be read on particular days. Then follows a page containing an illuminated cross.

The following contents are written in Syriac and Karshuni.

The gospel of Matthew begins on fol. 7 verso.

כחג וזמן אשנא כל חצותו נחמדת ארבע
 מנחה ונחמדת

It ends on fol. 105 verso with the following subscription.

על לחמדת ארבע מנחה ונחמדת ארבע
 חצותו כחג וזמן אשנא :

The gospel of Mark begins on 106 recto and ends on fol. 175 recto with the following subscription.

על לחמדת ארבע מנחה ונחמדת ארבע
 חצותו כחג וזמן אשנא : על לחמדת ארבע
 חצותו כחג וזמן אשנא :

The gospel of Luke begins on 175 verso and ends on 277 recto with the following subscription.

על לחמדת ארבע מנחה ונחמדת ארבע
 חצותו כחג וזמן אשנא : על לחמדת ארבע
 חצותו כחג וזמן אשנא : על לחמדת ארבע
 חצותו כחג וזמן אשנא : על לחמדת ארבע
 חצותו כחג וזמן אשנא :

The gospel of John begins on 277 verso and ends on 354 verso, with the following subscription.

על לחמדת ארבע מנחה ונחמדת ארבע
 חצותו כחג וזמן אשנא : על לחמדת ארבע
 חצותו כחג וזמן אשנא :

After which there is a finely written note concerning the composition of the four gospels.

The text is accompanied throughout by embedded liturgical directions for church use.

(Hav. 27.)

II.

A fine paper manuscript of the XIII (?) Century in the Estrangelo hand. Size of leaves $6\frac{1}{2} \times 8\frac{1}{2}$ inches, each containing two columns, 26 lines to the page.

It contains the whole New Testament including the Anti-legomena epistles.

On the first leaf a later hand has written "Simeon son of Joseph to Joseph son of Simeon." The rest of the quire is taken up with a list of lessons written in illuminated squares and circles. The table of chapters is prefixed to each gospel.

The gospel of Matthew ends on the verso of the third leaf of quire ∞ . The outside leaf in quire \surd is missing.

The gospel of Mark begins on the next leaf and ends on the recto of the fifth leaf of quire \surd , followed on the same page by the table of chapters of Luke. The gospel of Luke ends on the verso of the second leaf of the quire \surd followed on the same leaf by the table of chapters of John.

The gospel of John ends on the recto of the tenth leaf of \surd , and on the verso of the same leaf begins a harmony of the passion-gospels in the Heraclensian version which continues for 20 pages.

On the last leaf of \surd begins the Acts of the Apostles, which ends on the verso of the eighth leaf of \surd , and is immediately followed on the same page by the Epistle of James. Then follow 1 Peter and 1 John. After these epistles stand the four Anti-legomena epistles in the order 2 Peter, 2 John, 3 John, Jude, introduced as follows.

ܐܢܬܝ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ
ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ
ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ

The Epistles of Paul begin on the verso of the fifth leaf of **Δ** and run as far as **חס**. The manuscript is defective from Hebrews xi. 12 to xiii. 24 and ends with the following subscription.

ܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ
ܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ
ܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ

Then follows

ܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ
ܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ
ܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ ܕܡܠܟܐ

i. e. Glory to the Father who strengthened and to the Son who helped and to the Holy Spirit who aided, one true God by whose hope we began and by whose assistance we have finished.

Several other subscriptions follow.

The next page is filled by a closely written statement of the true doctrine of the Trinity. Several pages of supplementary matter conclude the volume, of which three are taken up with an extract from Mar Ephrem and seven with extracts from Mar Jacob of Serug, and one contains an illuminated cross.

(Hav. 28.)

III.

Late manuscript on paper containing 164 leaves each $5 \times 7\frac{1}{4}$ inches, much worm-eaten. The manuscript contains at the beginning the seal of the *σχολή πατρι-αρχική* of Jerusalem, to which it must at some time or other have belonged. The work extends from fol. 2 to fol. 149, after which there are some pages of supplementary matter, chiefly the lives of the Apostles.

The title of the book, which is somewhat erased on fol. 2, is repeated with some variations on fol. 149 and begins as follows.

ܠܟܠܢ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ
 ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ
 . . . ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ ܕܡܫܝܚܐ

i. e. by the power of our Lord Jesus Christ we begin to write the composition made concerning the Orthodox Faith which is confessed by the Catholic Church . . .

(Hav. 29.)

IV.

Manuscript on paper, size of leaves $2\frac{1}{2} \times 5$ inches, margins ruled in red ink, imperfect at beginning and end.

A Service Book. The divisions of the day or night are marked on the head lines. The prayers begin with ܠܡܫܝܚܐ ܕܡܫܝܚܐ "for the evening of the first day," and so on.

(Hav. 30.)

V.

Manuscript on paper, size of leaves $8\frac{1}{2} \times 12$ inches, with two columns on the page, each containing 20 lines. A Service Book beginning with the Order of Services for the Forty Days of Lent.

(Hav. 31.)

VI.

Manuscript on paper, companion volume to the preceding. The Order of Service begins with the order for Lent, but is marked second section.

This manuscript and the preceding were obtained from the Maronite Church at Besherreh in the Lebanon,

where they had been displaced by modern printed copies approved by the Pope.

(Hav. 32.)

VII.

Paper manuscript, size of leaves $8 \times 12\frac{1}{2}$ inches, each containing two columns, the right hand being written in Syriac, the left hand in Karshuni.

Contains the four gospels. Defective at beginning. The text of Matthew begins with the second ternion at ii. 21. The gospel of John ends on the verso of the first leaf of the 70th ternion.

A later hand has added a subscription that the book was written in 1209 of the Christian era.

(Hav. 33.)

ARABIC.

I.

Paper manuscript in exquisitely fine hand. The leaves are octagonal in shape, outside diameter $2\frac{3}{4}$ inches, but the writing is enclosed in a circle $2\frac{1}{4}$ inches in diameter. Interpunction and certain formulas in red. Contains the Qu'rân. Slightly defective at beginning and end. Bound in Oriental leather stamped in gold.

(Hav. 34.)

II.

Paper manuscript beautifully written with rich illuminations in gold and colors. In Oriental binding of red leather stamped with gold. Size of leaves 4×6 inches. Contains portions of the Qu'rân with current commentary.

(Hav. 35.)

III.

Paper manuscript, rather coarsely written. Size of leaves $6 \times 8\frac{1}{2}$ inches. Contains all the books of the New Testament in the order Ev., Act., Paul, Cath., Apoc. Defective at beginning, up to

Matt. ii. 22. كله كاف ليتم ما قيل مف قيل الرب بالبي
(Hav. 36.)

IV.

Paper manuscript neatly written with simple borders in red about each page. Size of pages $3\frac{1}{2} \times 4\frac{3}{4}$ inches. Beginnings of sections and certain other phrases rubricated.

كتاب صلوات النهاريه A volume of prayers by a Missionary in the East. At the end a Calendar with index of prayers suited to different days.
(Hav. 37.)

V.

Paper manuscript in European leather binding. Size of pages $3\frac{1}{2} \times 6$ inches. Contains a list of Arabic words, with their Syriac equivalents and an Arabic transliteration of the same.

(Hav. 38.)

ARMENIAN.

I.

Paper manuscript with illuminated initials and margins, and title page. Size of pages 4×6 inches. A Psalter or Hymn Book.

(Hav. 39.)

II.

Paper roll forming a modern Armenian Phylactery, containing pictures. $10\frac{1}{2}$ feet long.

(Hav. 40.)

III.

Portion of another Phylactery, incomplete.

(Hav. 41.)

LATIN.

I.

Paper manuscript, written in fine hand of the XIV Century. Initial letters in gold and colors, with ornamental borders. Size of pages $2\frac{3}{4} \times 4\frac{1}{8}$ inches. Bound in old brown velvet, and in excellent preservation.

Contains the Psalms and Canticles, with a Calendar. It was probably written by an English scribe, for many of the English saints occur in the Calendar, e. g. St Chad, St Cuthbert, St Oswald, etc. Imperfect at beginning, wanting title and one leaf of the calendar and imperfect also at the end.

(Hav. 42.)

II.

Paper manuscript of 123 leaves in a hand of the XV Century. It contains the Gospel accompanied by a current commentary.

(Hav. 43.)

III.

Paper manuscript neatly written in a hand of the XV Century, with small illuminated capitals. Two columns to the page, each of 40 lines.

A Concordance to the Vulgate.

Begins thus: *Abies. ysaias. pro saliunca ascendet abies et pro urtica crescet myrtus*, and so on, each passage being given to which reference is made. Ends with *Zona et precincta circa pectora zonis aureis.*

(Hav. 44.)

IV.

Vellum manuscript of the xv Century, probably written by an English scribe. It has borders and capital letters in gold and colors.

Contains following treatises of Thomas Aquinas.

Expositio devotissima orationis dominicae.

Expositio devotissima super salutatione angelica,—Ave Maria.

(Hav. 45.)

V.

Paper manuscript of the xvi Century. Contains Peter Vincentius de Ecclesiis regalibus regni Siciliae.

(Hav. 46.)

VI.

Vellum leaf from a Service Book of some English monastery. The name of St Egwyn appears frequently upon it, e. g.

Preparemus nos fratres in omni bonitate et gratia ut praeclarus pontifex et pius praedicator noster sanctus Egwynus gaudens nos ante tribunal summi iudicis in die ultimo diducat. etc.

(Hav. 47.)

THE PASSION OF PERPETUA

TRANSLATED BY

SETH K. GIFFORD.

[*For the text see Haverford Studies, No. 3.*]

[The Martyrdom of St Perpetua and her companions in Africa on the second of February.]

[Under Valerianus and Gallienus a persecution arose in which the saints Saturus, Saturninus, Revocatus, Perpetua and Felicitas suffered martyrdom on the fifth of February.]

1. If the ancient doctrines of the faith, which make manifest the glory of God and accomplish the edification of men, have been written to this end that we may use the reading of them in place of actual events and that God may be glorified, why shall not also the new examples, inasmuch as they operate helpfully to either result, in like manner be committed to writing? Is it that recent events have not the same assurance, since it appears that greater reverence attaches to the old? But these also will one day become old and be held by posterity in like honor and authority. But they will see, who hold to one power of one Holy Spirit throughout the ages of time, that it were necessary to attribute greater power to the newer, since these belong to the increase of grace promised for the end of the times. For in the last days, saith the Lord, I will pour out of my spirit upon all flesh, and your sons and your daughters shall prophesy, and your young men shall see visions and your old men shall dream dreams.

And we who receive and recognize new prophecies and visions and honor all the manifestations of the Holy Spirit as He ministers

to the holy Church, to which also He was sent, distributing all His gifts to all men as God has divided, of necessity make mention of the same and employ them to edification, doing these things in love to the glory of God; and lest by any means any one may be wavering and feeble in faith or may think, whether in the estimation of the martyrs or of revelations, that to the old alone grace and power have been given (since God is ever working out what He has promised to convince the unbelieving and to sustain those who believe), we proclaim to you, brethren and children, what we have heard and seen and handled, in order that those who were eye-witnesses may call to mind the glory of God, and those of you who now perceive through the hearing of the ear may have fellowship with the holy martyrs and through them with our Lord Jesus Christ, to whom be glory for ever and ever. Amen.

2. In the town of Thuburbo Minus, was arrested a group of young catechumens, Revocatus and Felicitas, fellow-servants, and Saturninus and Secundus; and with them Vibia Perpetua, of noble birth, reared in luxury, and married in high degree. She had a father and mother and two brothers, one of whom was likewise a catechumen. She was twenty-two years old and had a child still at the breast. She it is who has related the entire sequence of the martyrdom from this point, leaving her own thoughts written by her own hand, as follows.

3. While we were still under watch my father attempted to persuade me by argument, for the sake of his affection for me, to renounce my proposed confession. And I said to him, "Father, dost thou see, for example, some household vessel or the like lying here?" And he replied, "I do." And I, "Canst thou call it by any other name? No more can I call myself other than I am, a Christian." Thereupon my father confounded by these words rushed at me wishing to tear out my eyes; then merely crying aloud he went away vanquished, along with the devices of the devil.

Then while he was from home for a few days I returned thanks to the Lord and was glad at his absence. In the meantime we were baptized; and I was prompted by the Holy Spirit to ask nothing from the water of baptism except the patient endurance of the flesh.

After a few days we were cast into prison, and I was amazed. How dreadful a day! For never had I seen such darkness and

excessive heat. For the prison was crowded with a multitude of people chiefly by reason of the numerous false accusations of the soldiers. Beside all these things I was distressed on account of my infant child.

Then Tertius and Pomponius, blessed deacons who ministered to us, by paying gratuities caused us to be transferred to a milder quarter of the prison: then we breathed freely again and being brought thither each had leisure to himself. And the babe already wasted with hunger was brought to me and I gave it suck. I talked with my mother, I cheered my brother, I commended to them my child. But I was consumed with pain because I saw them grieving on my account; and being so exceeding sorrowful for many days, I accustomed the babe to remain with me in the prison. And it revived and I was lightened of my pain and trouble; and lo! the prison became to me a palace, so that I preferred to be there and not elsewhere.

4. Then my brother said to me, "Lady sister, already thou art in great honor and in such favor that thou mightest ask and receive a vision to the end that it may be shewn thee whether thou art to have a respite or to suffer presently." And I, knowing that I talked with God, from whom I had received so great benefits, being full of faith, promised him saying, "To-morrow I will tell thee." And I asked and this was shown me. I saw a ladder of brass, of marvellous size, whose top reached even to heaven, but so narrow that no one was able to ascend upon it except by himself alone. And there in either side of the ladder, swords and spears and hooks and knives and spikes of every kind were fixed, so that, if one ascended carelessly without looking up, his flesh might be torn by the points. And at the foot of the ladder was a dragon, exceeding great, lying in wait for those going up, and terrifying them that they might not dare to ascend. Now Saturus ascended: for he voluntarily surrendered himself later on our account, since we belonged to his charge, but when we were seized he was absent. When now he came to the top of the ladder, he turned and said: "Perpetua, I await thee, but take heed lest the dragon bite thee." And I said: "Nay! he shall not harm me, in the name of Jesus Christ." And as if fearing me, he quietly presented his head under the ladder. And when I thought to step upon the first round, I trod upon his head.

And I saw there a very great garden and in the midst of the garden a white-haired man of exceeding great stature, sitting in shepherd's dress, milking sheep. And many thousands stood about him in white raiment. And lifting his head he beheld me and said, "Welcome, my child." And calling me he gave me of the cheese from his milking as it were a morsel, and I received it with folded hands and ate it. And all those standing by said, "Amen." And at the sound of their voice I awoke, still chewing something sweet.

And I related the vision to my brother, and we perceived that it was appointed me to suffer, and from that time I began to have no hope in this life.

5. After a few days we learned that we were to have a hearing. My father also arrived from his long journey, worn out, and coming to me urged me to abandon my confession, saying: "Daughter, pity my white hairs, pity thy father, if indeed I am worthy to be called thy father. Remember that with these hands I have brought thee to this bloom of youth, preferring thee above thy brothers. ¹[Do not bring shame upon me in the sight of men. Consider thy brothers], consider thy mother and thy mother's sister. Have regard for thy son who cannot live after thee. Lay aside thy purpose and do not bring destruction on us all. For none of us will speak with boldness if any evil befall thee." Thus he spake as a father, with a parent's love, kissing my hands and casting himself at my feet with tears, calling me no longer daughter but lady. And I grieved at my father's state because he alone of my whole family did not rejoice in my suffering. But I consoled him saying, "This will come to pass at that tribunal if the Lord will, for know that we shall not be in our own power but in the power of God." And he departed from me sore distressed.

6. And on the day appointed we were hurried away to our hearing, and when we had come into the market-place, straightway a rumour went about the neighboring parts and there ran together a very great crowd. And when we came up to the tribunal the others were examined and confessed. And as I was about to be examined my father appeared with the child, and, drawing me to him, he said, "Sacrifice out of pity for the babe."

¹ This, and the following parts in brackets throughout the piece, are taken from the Latin version and do not appear in the Greek.

And Hilarianus, the procurator, who then at the death of the proconsul, Minutius [Timinianus], had received the power of the sword, said to me, "Spare the white hairs of thy father, spare the infancy of thy child: sacrifice for the welfare of the emperors." And when I replied, "I will not sacrifice," Hilarianus said, "Art thou a Christian?" And I said, "I am a Christian."

And when my father persevered to cast me down from my confession, at the bidding of Hilarianus he was thrust out, and moreover one of the guards struck him with his rod. And I grieved exceedingly, pitying his old age.

Then he condemned us all to the beasts, and with joy we went down to the prison.

Now since the child was fed at my breast and was accustomed to stay with me in the prison, I sent Pomponius the deacon to my father to ask for the babe. But he refused to give it up. Yet as God ordered, the child did not from that time desire the breast nor did any fever result, in order, perhaps, that I might not be oppressed both by anxiety for the child and pain in the breasts.

7. And after a few days while we were all praying, suddenly in the midst of our prayer I cried out and called Dinocrates by name. And I was filled with wonder, for never save at that time had I made mention of him, and I was grieved as I called to mind his end. But straightway knowing that I was worthy to make a petition for him I began to pray to the Lord mightily with groanings. And immediately in this very night there was shown me this vision.

I beheld Dinocrates coming forth from a dark place, where were also many others burning and parched with thirst, his raiment foul, his countenance pallid, and the wound still in his face which he had when he died.

This Dinocrates, my brother according to the flesh, at seven years had sickened and died, his face mortified with gangrene so that his death was loathsome to all. I saw now between him and me a great interval so that we were unable to approach each other. And in that place in which my brother was, there was a fountain filled with water: but its margin was higher than the stature of the child. To this Dinocrates was stretching desiring to drink. And I grieved because, though the fountain was full of water, the child was unable to drink on account of the height of the margin.

And I awoke, and knew that my brother was in distress, but I was confident that I should be able to help him in the intervening days, during which we were brought down to the other prison, that of the tribune. For it was near the Camp where we were to fight with beasts. For Caesar's birthday was about to be celebrated. Then, praying earnestly with groanings for my brother, day and night, I desired confidently that he might be given unto me.

8. And straightway in the evening in which we remained in the stocks there was shown me this vision. I beheld the place in which I had seen Dinocrates, [bright, and Dinocrates] refreshed, in beautiful raiment, his body cleansed, and where the wound was I saw a scar. And the margin of the fountain from which water was flowing continually was brought down to his waist. And above the margin was a golden cup, full. And Dinocrates approached and began to drink from it, and the cup did not fail. And having drunk his fill he began to play joyously after the manner of children. And I awoke and perceived that he was delivered from punishment.

9. And after a few days one Pudens, a soldier, who had charge of the prison, began with much earnestness to honor us and to glorify God, perceiving great power to be in us. Wherefore he did not prevent many from coming to us, so that we were comforted by mutual consolations.

And when the day of the spectacle drew nigh my father came to me, worn with grief, and began to pluck out his beard and throw himself upon the ground, and lying on his face to reproach his years with such words and accusations as might move the whole world. And I grieved for his wretched old age.

10. Now the day before we fought with beasts I beheld this vision. Pomponius the deacon came to the gate of the prison and knocked vehemently. And going out I opened to him. And he was clothed in shining raiment, his loins girded, and many-colored sandals upon his feet. And he said to me; "I await thee, come." And he took my hands, and we passed through rough and crooked places, and came with difficulty to the amphitheatre. And leading me into the midst thereof he said unto me: "Fear not. I am here with thee to share thy struggle." And he departed. And lo! I see a very great throng looking eagerly upon the spectacle. And knowing that I had been condemned to the beasts I wondered that they were not let loose upon me.

And there came forth against me an Egyptian, ugly in appearance, together with his helpers to fight with me.

Then there came to me a youth most fair in form, radiant with beauty, and with him other beautiful youths to help and support me. And I was stripped and became a man. And my assistants began to rub me with oil as is the custom in the contest; and before me I beheld that Egyptian rolling in the dust. Then came forth a man of wonderful size, exceeding in stature the top of the amphitheatre, clad in a robe which had the purple, not only from the two shoulders, but also between, upon the breast. He had also many-colored sandals of gold and silver; and bore a rod like a judge or trainer of gladiators. He carried also green branches with golden apples. Then having commanded silence he said: "If this Egyptian conquer this woman he shall slay her with the sword, but if she conquer him she shall receive this branch." And he withdrew. And we advanced against each other and began to contend in the Pancration¹. And when my adversary strove to seize my feet, I kicked him, smiting him in the face. And lo! I was lifted up by the air, and began to strike him as though not treading upon the ground.

And seeing that I did not even yet hurt him, folding my hands and locking finger in finger, I seized his head and hurled him upon his face and trampled upon his head.

Then all the throng began to shout, and my supporters to exult. And coming to the judge I received the branch, and he kissed me and said, "Peace be with thee, daughter." And straightway we began to go with glory to the so-called gate of life. And I awoke and perceived that my approaching conflict was not with beasts, but with the devil. And I knew that I should conquer him.

These things I have written until the day before the spectacle; what shall take place in the amphitheatre let him describe who will.

11. But also the blessed Saturus himself committed to writing and made known his vision, as follows: It was as though we had already suffered and had passed out from the flesh. And we began to be borne by four angels towards the east. Their hands did not touch us, yet we proceeded upward, not lying upon our

¹ A form of contest in which wrestling and striking were alike permitted.

backs, but carried, as it were, along an even ascent. And passing beyond the first world we saw a light of exceeding brightness. Then I said to Perpetua (for she was near me), "This is what our Lord promised. We have obtained part in the promise." And as we floated upward, borne by the four angels, a great plain came to view which was, as it were, a garden, having rose trees and every kind of flowers. The height of the trees was as the height of a cypress. And the trees cast their leaves incessantly. Now there were with us in the garden four [other angels more beautiful than those by whom we were borne, and when they saw us they gave us honor and said to the other angels, Lo! here are they].

And as we trembled and wondered they set us down. And resuming our way we passed through the plain on our own feet. There we found Jucundus and Saturus and Artaxius who in this persecution were hanged. And we saw Quintus the martyr who died in prison. And we asked also about the others where they were. And the angels said to us, "Come first within that you may greet the Lord."

12. And we came near that place which had walls built as it were of light, and coming before the gate thereof, the four angels clothed us with white robes. And entering in we heard a united voice of those crying continually, "Holy, Holy, Holy!" And we saw seated in the midst of that place as it were a white-haired man, whose hair was like snow, and his countenance youthful; but his feet we did not behold. And four elders were on his right hand and four on his left, and behind the four were many elders. And wondering we entered and stood before the throne, and the four angels lifted us up and we kissed him, and with his hand he caressed our faces. Then said the elders to us, Let us stand and pray. And when we had made the Peace the elders sent us away, saying, "Go, and rejoice." And I said, "Perpetua, thou hast what thou didst desire." And she said, "Thanks be unto God, that great as was my joy in the flesh, now is my joy greater."

13. And coming out we saw before the gates Optatus, the bishop, and Aspasius, the presbyter, separated on the left hand and exceeding sorrowful. And falling at our feet they said to us: "Reconcile us to each other, seeing that you have gone forth and thus have left us behind." And we said to them: "Art not

thou our bishop, and thou our presbyter? Why do ye thus fall at our feet?" And pitying them we embraced them. And Perpetua began to talk with them in Greek. Then we went back with them into the garden under the rose tree. And as they talked with us the angels answered them, "Let these have rest, but if you have differences with each other remit them of yourselves one to the other." And they rebuked them, saying to Optatus: "Set in order thy flock, for they gather about thee as though returning from the races and contending about them." And it seemed to us as though they wished to shut the gates. And we began to recognize there many of the brethren but the martyrs as well. And we were all fed by an indescribably sweet odour which did not satisfy us. And straightway with joy I awoke.

14. These are the visions most manifest of the martyrs Saturnus and Perpetua which they themselves wrote. For as regards Secundus God summoned him from the world earlier. For while he was in prison he was deemed worthy of his calling, gaining surely this grace, not to fight with beasts. Yet the sword if it passed not through his body, passed at least through his soul.

15. And upon Felicitas also was bestowed the grace of God. For since it is not lawful for a woman in pregnancy to fight in the arena or to be punished, she, being eight months with child, when apprehended, was filled with sorrow lest perchance her innocent blood should afterwards be shed in company with unholy criminals. Her fellow-martyrs, too, were exceeding sorrowful, not wishing to leave behind so goodly a comrade and, as it were, fellow-traveller on the road to the same hope.

Now, on the third day before their passion, with united groanings they prayed unto the Lord, and immediately after the prayer, pains seized upon her, severe according to the nature of the eighth month, and she was distressed with labor. And one of the watch in attendance said to her: "If now thou art so distressed what wilt thou do when thrown to the beasts which thou didst despise, despising to offer incense and not being willing to sacrifice?" And she replied: "Now it is I who suffer what I suffer; but then it is another who suffers for me. He will be in me to suffer since I suffer for His sake." And she gave birth to a girl babe, which one of the sisters took and reared as her own daughter.

16. Unworthy though we be, the Holy Spirit has permitted

us to record the sequence at the spectacle. Moreover in obedience to the command of the blessed Perpetua, or rather to her charge, we fulfil the task committed to us.

When now a longer time elapsed, while they were in the prison and the tribune was dealing harshly with them, since certain ones idly maintained that there was danger lest by magic charms they might escape from the prison, that truly noble and courageous Perpetua answered him to his face, saying, "Why dost thou not allow us to regain our strength, notable criminals as we are, reserved for death on Caesar's birthday? Is it not to thy credit the fatter we come to the arena?" At this the tribune shuddered and was ashamed and commanded to treat them more humanely. So that her brother and certain others were able to come in and be refreshed with them. Then also the keeper of the prison himself believed.

17. But also on the day before their suffering when they ate that last supper which is called the free meal, (but for themselves in their boldness they did not call it a free meal but a love feast), to¹ the crowd gathered there they used great boldness of speech, threatening them with the judgment of God, testifying to the blessedness of their suffering, scorning the meddling curious multitude who ran together, while Saturus said: "Is not to-morrow enough for you? Why do ye gladly look upon those whom ye hate, friends to-day, to-morrow enemies? But mark well our faces that ye may know us in that day." Thus all withdrew astonished, of whom very many believed.

18. And the day of their victory shone forth, and they went out from the prison to the amphitheatre as though to heaven, glad and radiant in countenance, their hearts beating, shall I say with joy rather than with fear. And Perpetua followed walking meekly as a matron of Christ with watchful eye and by her mien casting down the gaze of all. Likewise also Felicitas, rejoicing in her recovery from childbirth that she might fight with beasts, from blood to blood, from midwife to the strife of the arena, to be washed after labor with the second baptism, to wit, her own blood. But when they came near the amphitheatre, an attempt was made to compel them to put on the guise of priests, the men that of the priests of Kronos, the women that of the priestesses

¹ This clause has been rendered as the apodosis of the sentence which seems to be an instance of anacoluthon occasioned perhaps by the parenthesis.

of Demeter. Then that most noble Perpetua contended with boldness to the end, for she said: "For this reason we have willingly come to this state, that our liberty might not be impaired: for this reason we have forfeited our lives that we might not do any such thing. This compact we struck with you." Injustice recognized justice. And afterwards the tribune allowed them to be brought in as they were, while Perpetua sang, already trampling upon the head of the Egyptian. And Revocatus and Saturninus and Satorus held converse with the crowd of spectators. And when they came in front of Hilarianus, they said by gestures and signs, "Thou, us; and thee, God." At this the crowd became furious and shouted that they should be scourged. But the holy saints rejoiced in that they endured something even of the Lord's sufferings.

19. And He who said: "Ask and ye shall receive," gave to those who asked this glory as each of them desired. For whenever they talked among themselves of their prayer regarding martyrdom, Saturninus wished to be thrown to all the beasts that, doubtless, he might receive a more glorious crown. Accordingly in the beginning of the spectacle he with Revocatus awaited the attack of a leopard, and also later upon the bridge he was torn by a bear. But Satorus shrank from nothing except a bear and desired¹ to be perfected by one bite of a leopard. Therefore when offered to the boar he was merely dragged, bound to him by a rope, while the hunter who cast him to the boar was so wounded by the beast that he died the day after the spectacle. And also when bound to a bear he again came forth safe; for the bear would not come forth from her cage.

20. But for the blessed women, the devil prepared a maddened heifer, rivalling their sex in the beast. And they were brought in naked, at which the crowd drew back seeing them, the one a delicate girl, the other fresh from childbed with milk dripping from her breasts. Thus they were withdrawn and wrapped in nets and dressed in under-garments; and then coming in, Perpetua was first tossed and fell upon her loins; and sitting up, she drew together her garment from her side covering her thigh. For she minded shame more than pain, in no wise heeding her sufferings. Then seeking a pin, she fastened the rent together,

¹ The translation follows *ἐπεπόθει*, the MS. reading, instead of *ἐπεποθέει* of the text.

and bound up her hair. For it was not seemly for a martyr to be seen with dishevelled hair, lest in her glory she should seem to lament.

[Then she arose and seeing that Felicitas had been struck, she went to her], and grasping her hand lifted her up. And they stood together, and the hardness of the crowd being overcome they were called back to the gate of Life. There Perpetua was aroused as if from sleep by a certain catechumen, Rusticus by name, who was standing by her side (so completely had she been in the Spirit and entranced), and looking about, to the amazement of all, said: "When are we to be thrown to the heifer of which they talk?" And being told that it had already come forth against her, she would not believe until she had seen certain marks of harm on her own person. When these had been shown her, she called her brother and the catechumen, and exhorted them to remain in the faith and to love each other and not to be offended because of these sufferings, great though they were.

21. At another gate Saturus was conversing with the soldier, Pudens, saying in substance: "As I said and foretold, not even one of the beasts has touched me until now; but lo, now, that thou mayest believe from thy whole heart, I shall go forth and with one bite of a leopard I shall be perfected." And immediately in the end of the spectacle a leopard was let loose upon him and with one bite was drenched with the blood of the saint. There flowed so much blood that it was regarded as evidence of the second baptism, as also the crowd cried, shouting and saying, "Well washed! well washed!" Verily he was saved who was washed in such manner.

Then to the soldier, Pudens, he said: "Farewell, remember the faith and me, and let these things strengthen thee rather than confound thee." And asking of him a ring and dipping it in his blood he gave it to him, a blessed inheritance, leaving a remembrance and a pledge of so much blood.

After this he was brought still alive with the others to the accustomed place. But the people demanded that they should be taken into the midst for slaughter, in order that they might behold the sword driven through their holy bodies. Then the blessed martyrs arose willingly (for they were ashamed to have only a few witnesses at their blessed death). And when they came where the crowd wished, they first kissed each other that

they might fulfil the mystery through the observances of the faith, and then gladly awaited the penalty of the sword. But much more Saturus, who first ascended that ladder, who also bade¹ Perpetua ascend.

But Perpetua, that she too might taste of pain, cried out when pierced about the bones by the sword of the untrained gladiator, and seizing his uncertain hand, she brought it to her throat. Perhaps it was that the unclean spirit feared so great a woman, and was unable to take her life against her will.

O most valiant and blessed martyrs and soldiers, chosen and called to the glory of the Lord Jesus Christ. How shall we extol you or bless you, most noble soldiers? Surely if the ancient writings are read to the edification of the church, not less worthy to be read is the all-virtuous course of the blessed martyrs, [that it may testify to the continual operation of One and the Same Holy Spirit even until now]: those blessed martyrs through whom we ascribe glory to the Father of the worlds together with his only begotten Son, our Lord, Jesus Christ, with the Holy Spirit, to whom be the glory and the power for ever and ever. Amen.

¹ The reading is quite doubtful.

SPECIMENS OF UNCIAL LECTIONARIES

FROM

MOUNT SINAI.

BY

J. RENDEL HARRIS.

THE Library (or should we not rather say Libraries?) of the Sinaitic Convent contains a large mass of lectionary matter, both in fragments and in complete books. For the latter we have only to look at the Catalogue of Gardthausen to see a rich and varied collection of which some (such as, for example, the so-called Golden Lectionary) may be found worthy of a collator's attention.

Amongst the fragments preserved from earlier times, or extracted from the bindings of other books, there are also a few which may turn out to be worthy of a little attention. Some of them are mere shreds and strips, and others are well-preserved pages. Five such specimens are here given from our memoranda and photographs. They seem to range in date from the beginning of the seventh century to the end of the tenth. I have not, however, attempted any detailed description of them.

No. 1.

Recto.

Col. 1.

ΠΑΤΕΙΝΕ
ΠΑΝΩΦΕ
ΩΝΚΑΙΣΚΟΡ
ΠΙΩΝ

5

.
.
.
.

10

ΕΝΤΟΥΤ
ΜΗΧΑΙΡΕ
15 ΤΕ · ΟΤΙΤΑ
ΠΝΕΥΜΑ
ΤΑΥΜΙΝΥ
ΠΟΤΑΣΣΕ
ΤΑΙΧΑΙΡΕ
20 ΤΑΙΔΕ · Ο

Col. 2.

.
.
.

ΝΟΥΚΑΙΤΗΣ
ΓΗΣΟΤΙΑ
ΠΕΚΡΥΥΑΣ
ΤΑΥΤΑ · ΑΠΟ
ΣΟΦΩΝ
ΚΑΙΣΥΝΕ
ΤΩΝ · ΚΑΙΑ

Luke x. 19—21.

No. 1.

Verso.

Col. 1.

Col. 2.

ΠΕΚΑΛΥΨΑΣ
 ΑΥΤΑΝΗΠΙ
 ΟΙΣ·ΝΑΙΟ
 ΠΗΡ·ΟΤΙ
 5 ΟΥΤΩΣΕ
 ΓΕΝΕΤΟ·
 ΕΥΔΟΚΙΑ
 ΕΜΠΡΟΣ
 ΘΕΝΣΟΥ

10

ΤΩΝΔΓΙΩΝΔΝΑΡ
 ΓΥΡΩΝ

15

ΕΥΑΓ·ΚΑΤΑΜΑΤΘΑΙΟΝ

ΤΩΚΑΙΡΩ
 ΚΕΙΝΩΠΡΟΣ
 ΚΑΛΕΣΑΜΕ
 ΝΟΣΟΙΣ
 20 ΤΟΥΣΔΩ

ΔΕΚΑΜΑ
 ΘΗΤΑΣΑΥ·
 ΤΟΥΕΔΩ
 ΚΕΝΑΥΤΟΙΣ
 ΕΞΟΥΣΙΑ·
 ΠΝΕΥΜΑ
 ΤΩΝΑΚΑ
 ΘΑΡΤΩΝ
 ΩΣΤΕΕΚ
 ΒΑΛΕΙΝΑΥ
 ΤΑ·ΚΑΙΘΕ
 ΡΑΠΕΥΕΙ
 ΠΑΣΑΝΝΟ
 ΣΟΝΚΑΪΠΑ
 ΣΑΝΜΑΛΑ
 ΚΙΑΝΤΟΥ
 ΤΟΥΣΑΠΕ
 ΣΤΕΙΛΕΝ
 ΟΙΣ·ΠΑΡΑΓ
 ΓΕΙΛΑΣΑΥ

Luke x. 21. Matt. x. 1—5.

No. 2.

Fol. 1, recto.

. ΚΑΘ
 ΟΤΙ Η ΕΛΙΣΑΒΕΤΗ ΝΣΤΕΙ
 ΡΑ ΚΑΙ ΑΜΦΟΤΕΡΟΙ ΠΡΟΒΕ
 ΒΗΚΟΤΕ ΣΕΝΤΑΙ ΣΗΜΕ
 5 ΡΑΙ ΣΑΥΤΩΝ ΗΣΑΝ :
 ΕΓΕΝΕΤΟ ΔΕ ΕΝ Τῷ ΙΕΡΑ
 ΤΕΥΕΙΝ ἈΥΤΟΝ ΕΝ ΤΗ
 ΤΑΞΕΙ Τῆς ΕΦΗΜΕΡΙΑΣ
 ΑΥΤΟΥ · ΕΝΑΝΤΙΟΝ ΤΟΥ
 10 [ΘΥΚΑΤΑ] ΤΟ ΕΘΟС ΤΗΣ
 [ΙΕΡΑΤΕΙΑς] ΕΛΑΧΕΤΟΥ
 ΘΥΜΙΑΣ ΑΙΕΙΣ ΕΛΘΩΝ
 [. . . .] ΝΑΟΝ ΤΟΥ
 ΘΥΚΑΙ ΠΑΝΤΟ ΠΛΗΘΟС

Luke i. 7—10.

No. 2.

Fol. 2, recto, A.

. ΕΥΑΓ
 ^Τ
 ΓΕΛΙΟΝΚΑ ΛΟΓΚΑΝ:
 ΤΩΚΑΙΡΩΕΚΕΪΝΩ
 ΟΚΣΗΜΩΝ
 5 . . . ΔΙΗΡΧΕΤΟΤΗ
 . . . ΚΑΙΪΔΟΥΑΝΗΡ
 ΟΝΟΜΑΤΙΚΑΛΟΥΜΕ
 ΝΟΣΖΑΚΧΑΙΟΣ· ΚΑΙΔΥ
 ΤΟCΗΝΑΡΧΙΤΕΛΩΝΗΣ
 10 ΚΑΙΟΥΤΟCΗΝΠΛΟΥCΙ
 ΟC: ΚΑΙΖΗΤΕΙΪΔΕΙΝ
 ΤΟΝΙΝΤΙCΕCΤΙΝ· ΚΑΙ

Luke xix. 1—3.

Fol. 2, recto, B.

ΟΥΚΗΔΥΝΑΤΟΑΠΟ
 ΤΟΥΧΟΛΟΥ· ΟΤΙΤΗ
 15 ΗΛΙΚΙΑΜΙΚΡΟCΗΝ:
 ΚΑΙΠΡΟCΔΡΑΜΩΝΕΪΜ
 ΠΡΟCΘΕΝ· ΑΝΕΒΗC
 ΠΙCΥΚΟΜΟΡΕΑΝ· ΪΝΑ
 [ΪΔΗ]ΔΥΤΟΝ: ΟΤΙΔΙΕ
 20 ΚΕΙΝΗΣΗΜΕΛΛΕΝΔΙ

Luke xix. 1—4.

No. 2.

Fol. 2, verso, A.

ΑΝΑΒΔΕΨΑCΙC· . . .
 ΑΥΤΟΝ . . . ΕΙΠΕΝ·
 ΖΑΚΧΑΙΕ· CΠΕΥCΑC
 ΚΑΤΑΒΗΘΕΙ· CΗΜΕ
 ΡΟΝ ΓΑΡ ΕΝ Τῷ ΟΙΚῳ
 CΟΥ ΔΗΜΕΜΕΙΝΕ·
 ΚΑΙ CΠΕΥCΑC ΚΑΤΕΒΗ
 ΚΑΙ ΥΠΕΔΕΞΑΤΟ ΑΥ
 ΤΟΝ ΧΑΙΡΩΝ· ΚΑΙ
 ΔΟΝΤΕC ΠΑΝΤΕC

Luke xix. 5—7.

Fol. 2, verso, B.

ΤΩ Λῶ ΑΝΔΡΙΕΙC [ΗΛ]
 ΘΕΝ ΚΑΤΑΛΥCΑΙ·
 CΤΑΘΕΙC ΔΕ ΖΑΚΧΑΙ
 ΟC· ΕΪΠΕΝ ΠΡΟC ΤΟΝ
 ΚΝ· ΙΔΟΥ ΤΑ ΕΜΙCΥ
 ΤῶΝ ΥΠΑΡΧΟΝΤῶ
 ΜΟΙ ΚΕ· ΤΟΙC ΠΤΩ
 ΧΟΙC ΔΙΔΩΜΙ· ΚΑΙ ΕΙ
 ΤΙΝΟC ΤΙ ΕCΥΝΟΦΑ

Luke xix. 7, 8.

No. 3.

Fol. 1, recto.

εγωδελεγω^ιμιναγαπα^{τε}
 το^υς^εχ^θρο^υς^υμ^ων. ^ευ^λο^γει
 τε^{το}υ^ςκα^{τα}ρω^{με}νο^υς^υμ^ων^{και}
 κα^{λο}ς^{ποι}η^{ται}το^ις^{μι}σο^υς^{ιν}
 5 ^υμ^ας· και^{προ}ς^ευ^χε^{θε}υ^{πε}ρ
 τ^ων^επ^ηρε^αζ^{ον}των^υμ^ας
 *Ο^πω^ςγε^{νη}σ^θαι^ιο^ιτο^υπ^ρς^υμ^ων
 το^υζ^ενο^υρ^ανο^ις. ^οτι^ον^ηλι
 ο^{να}γ^το^υα^{να}τε^{λει}ε^{πι}πο^{νη}
 10 ρ^ος^{και}α^{γα}θ^ος. και^βρε^{χει}
^επι^{δι}κα^{ιο}ς^{και}α^{δι}κο^υς

Matt. v. 44—45.

Fol. 1, verso,

. . . ^υμ^ας[^{τι}να]μι^σθ^ονε^{χε}
 τ^{αι}·[ο^υχ^ηο^ι]τε^{λω}ν^{αι}ποι
 ο^υς^{ιν}το^υτο· και^εα^{να}σ^{πα}[^{ση}]
 τε^{το}υ^ςφι^{λο}υ^ςυ^μω^νμο^{νο}ν
 τι^{πε}ρι^σσ^{ον}ποι^{ει}τε· ο^υχ^ηκαι
 ο^ιτε^{λω}ν^{αι}ποι^ου^ςιν^{το}υ^{το}·
 ε^σε^σθ^{αι}ο^γνη^μει^στε^{λει}ο^ι·ω^ς
 πε^ρο^πη^ρυ^μω^νο^ογ^{ρα}ν^{ιο}σ^{τε}
 λ^{ει}ο^ςε^{στι}ν

Matt. v. 46—48.

No. 3.

Fol. 2, recto.

ciς ἀφανίζει· καὶ ὁ ποῦ κλε
 πταιοῦ δι' ὁρῶντες· ὅγε κλε
 πτοῦσιν· ὁ ποῦ γὰρ ἐστὶν ὁ θη
 σαυρὸς ὧν· ἐκίεσται καὶ ἡ
 καρδια ὧν· ὁ λῆχνοσ του
 σώματος ἐστὶν ὁ οὐφθαλμος
 ἔδνο ὁ νοῦ οὐφθαλμοσσοῦ· ἀπλου
 σῇ· ὁ λοντος ὡμασσοῦ φωτινον
 ἔσται· ἐλνδε ὁ οὐφθαλμοσσοῦ
 πονηρὸς ῃ· ὁ λοντος ὡμασσοῦ σκο
 τινον ἔσται· εἰοῖντο φως

[Matt. vi. 20—23.]

Fol. 2, verso.

.. τοις κοτοσ ἐστιν· τοσ κοτοσ πο
 σον· ὅγε ἱς δύναι διὰ γὰρ κίριοις
 δογλέγειν· ἡ γὰρ τὸν ἐν αἰ
 ησει· καὶ τὸν ἑτερον ἀγαπήσει·
 ἡ ἐνοσ ἀνθέζεται· καὶ τοῦ ἑτε
 ροῦ καταφρονήσει· οὐδὲ
 νασθαίθω δογλέγειν καὶ αἶμα
 μων· διὰ τοῦτο λέγω ὑμῖν·
 μὴ μεριμνᾶτε τὴν ψυχὴν ὑμῶν
 τί φάγεται· ἢ τί πίετε· μὴ
 δεῦσ ὡματιμῶν· τί ἐν δὲ
 σῇσθε· ὁ γὰρ ἡ ψυχὴ πλείον

[Matt. vi. 23—25.]

No. 3.

Fol. 3, recto.

εστιν τῆς τροφ[η]ς καὶ τὸ σῶ
 ματοῦ ἐν δόγματι· ἐμβλέ
 ψατε εἰς ταπετὴν ἀποτοῦ οὐρανοῦ
 ὅτι οὐ σπείρουσιν· οὐδε θερίζου
 σιν· οὐδε συνάγουσιν εἰς ἀπο
 θήκας· καὶ ὁ πηγμῶν οὐρα
 νιος· τρέφει αὐτά· οὐχ ἡμεῖς
 μάλλον διαφερετέων
 τινος δὲ ζυμῶν μερὶ μνησθῆναι
 ναταί· προσθήναι ἐπιτην ἡλι
 κίαν ἀποτοῦ· πηγμῶν δὲ καὶ πε
 ρι ἐν δόματι

[Matt. vi. 25—27.]

Fol. 3, verso.

. . . λεγὼ δὲ ὑμῖν· ὅτι οὐ
 σολομὼν ἐν πασὶν τοῖς ἑσθίον
 αἰσιν ἐπεὶ ἐβαλλετο ὡς ἐν
 τοιγῶν· εἶδε τὸν χορτὸν
 τοῦ ἀγροῦ σήμερον ὄντα
 καὶ αὔριον εἰς κληβανὸν βαλλο
 μένον· ὅτι οὐ γὰρ ἔσται αὐτῷ
 ὅτι πολλὸν μάλλον

[Matt. vi. 28—30.]

No. 3.

Fol. 4, recto.

ΤΙΦΑΓΩΜΕΝ· ΗΤΙΠΙΩΜΕΝ
 ΗΤΙΠΕΡΙΒΑΛΛΟΜΕΘΑ· ΠΑΝΤΑΓΑΡ
 ΤΑΥΤΑΤΑ^ΕΘΝΗ^ΕΠΙΖΗΤΗ· ΟΙ
 ΔΕΝΓΑΡΟΠΗΡΥΜΩΝ^ΟΟΥΡΑΝΙΟΣ
 ΟΤΙΧΡΗΖΕΤΕΤΟΥΤΩΝΠΑΝΤΩΝ
 ΖΗΤΕΙΤΕΔΕΠΡΩΤΟΝΤΗΝΒΑ
 ΣΙΛΕΙΑΝΤΩΝΟΥΡΑΝΟΝΚΑΙΤῆν
 ΔΙΚΑΙΟΣΥΝΗΝΑΥΤΟΥ^{ΚΑΙ}ΤΑῦ
 ΤΑΠΑΝΤΑΠΡΟΣΤΕΘΗΣΕΤΑΙΥμῖν·
 ΜΗΟΥΝΜΕΡΙΜΝΗΣΗΤΕΕΙΣΤΗν
 ΛΥΡΙΟΝ· ΜΕΡΙΜΝΗΣΗΤΑῖΑυ
 ΤΗΣ[ΔΡ]ΚΕΤΟΝΤΗ^ΗΜΕΡΑ^Η

[Matt. vi. 31—34.]

Fol. 4, verso.

ΚΑΚΙΔΔΥΤΗΣ·
 Τ Τ
 ΣΑΒΒΑΤΟΥΑΓΙ· ΝΙC· ΚΑΤΑΛΟΥΚΑΝ
 ΕΓΕΝΕΤΟΕΝΤΩΕΙΝΑΙ[ΤΟΝ]
 ΚΝΗΜΩΝΙΝ^ΧΝΕΝ
 ΤΟΠΩΤΙΝΙΠΡΟΣΕΥΧΟΜΕΝΟΝΩC
 ΕΠΑΥCΑΤΟ· ΕΙΠΕΝΤΙCΤΩΝ
 ΜΑΘΗΤΩΝΑΥΤΟΥ^ΠΠΡΟCΑΥΤΟΝ·
 ΚΕΔΙΔΑΞΟΝΗΜΑCΠΡΟCΕΥ
 ΧΕCΘΑΙ· ΚΑΘΩCΚΑΙΩΔΑΝ
 ΝΗΣΕΔΙΔΑΞΕΝΤΟΥC[ΜΑΘΗ]
 ΤΑCΑΥΤΟΥ· ΕΙΠΕΝ[ΔΕΑΥΤΟΙC]
 ΟΤΑΝΠΡΟCΕΥΧΕCΘΕ

[Luke xi. 1, 2.]

No. 4.

εἰς τὴν ὑπέρθεσιν· εὐ
 αγγελίον καταΐωάννη·
 ἦν ἐγγύς τοῦ πάσχα
 τῶν ἰουδαίων·
 καὶ ἀνέβησαν πολλοὶ
 εἰς ἱεροσόλυμα ἐκ τῆς
 χῶρας προτοῦ πάσ
 χα· ἵνα ἀγνίσωσιν
 εαυτοῦς· ἐζητοῦν
 οὖν τὸν νῆιν· καὶ ἔλε
 γον μετὰ ἑλλήλων·
 ἔστιν ὁ τέσεν τῶ ἱε
 ρῶ· τί δοκεῖ ἡμῖν·
 ὅτι οὐ γὰρ ἔλθῃ ἐκ τῆς
 ἑορτῆς· δὲ δώκει
 σα ἡ εὐοίαρχι ἐρεῖς·
 καὶ οἱ φαρεῖσαῖοι ἐν τῇ
 λῆν· ἵνα ἐάν τις γινῶ·
 ποῦ ἔστιν ἡ μνηστῆς·
 ὅπως πιάσῃ τὸν αὐτόν·
 > > > > > > >

[John xi. 55—57.]

No. 5.

Recto.

Col. 1.

τα^απολω^ωλό
 τα^αοίκο^ογι^ινη^ηλ·
 Η^ηδέ^εελ^λθο^ογ^γσα^απ^προ^ο
 εκ^κύ^υνη^ης^ςε^ενα^αγ^γ
 τ^τω·λέ^εγο^ος^ςα·
 Κ^κε^εβο^οή^ηθ^θει^ιμο^οι·
 ὁ^οδέ^εα^απο^οκρι^ιθ^θει^ις
 ει^ιπε^εν·ὁ^ογ^γκ^κε^ες
 τι^ινη^ηκα^αλὸ^ον^νλα
 β^βει^ιν^ντὸ^ον^νἄ^αρ^ρτο^ον·
 τ^των^ντέ^εκ^κνη^η·
 και^ιβα^αλε^ει^ιν^ντο^οι^ις
 κ^κυ^υνα^αρι^ιο^οι^ις·
 Η^ηδέ^εε^ει^ιπε^εν·να^αί^ικε^ε
 και^ιγ^γάρ^ρτ^τά^ακ^κυ
 νά^αρι^ια^αέ^ες^ςθ^θι^ιε^εια
 πο^οτ^τῶ^ων^νψ^ψι^ιχ^χί
 ὠ^ων^ντ^τῶ^ων^νπ^πι
 π^πτο^ον^ντ^τω^ωνα

Col. 2.

πο^οτη^ηστ^τρα^απέ
 ζη^ηστ^τῶ^ων^νκ^κυ
 ρι^ιων^να^αγ^γτ^τῶ^ων·
 Το^οτε^εα^απο^οκρι^ιθ^θει^ις
 ο^οι^ις^ςε^ει^ιπε^εν^να^αγ^γτ^τῆ^η·
 ὦ^ωγ^γν^ναι·με
 γά^αλη^ης^ςο^ογ^γη^ηπ^πί^ις
 τι^ις·γε^ενη^ηθ^θή
 τ^τω^ως^ςο^οι^ιῶ^ως^ςθ^θέ
 λ^λει^ις·και^ιἰ^ια^αθ^θη
 ἡ^ηθ^θυ^υγα^ατη^ηρ
 α^αγ^γ·ἡ^ης^ς·α^απο^οτη^ης
 ὠ^ωρα^ας^ςε^εκει^ινη^ης·
 τ^τ τ^τ
 εκ^κκα^αλο^ογ^γκ^κ·
 Ε^ει^ιπε^ενο^οκ^κστο^οι^ις·
 ε^εα^αγ^γτο^οῦ^υμα^αθ^θη^η·
 π^προ^οε^εχ^χε^ετε^εα^απο
 τ^τῶ^ων^νγ^γρα^αμ
 μα^ατέ^εω^ων^ντ^τῶ

[Matt. xv. 24—28. Luke xx. 45—46.]

No. 5.

Verso.

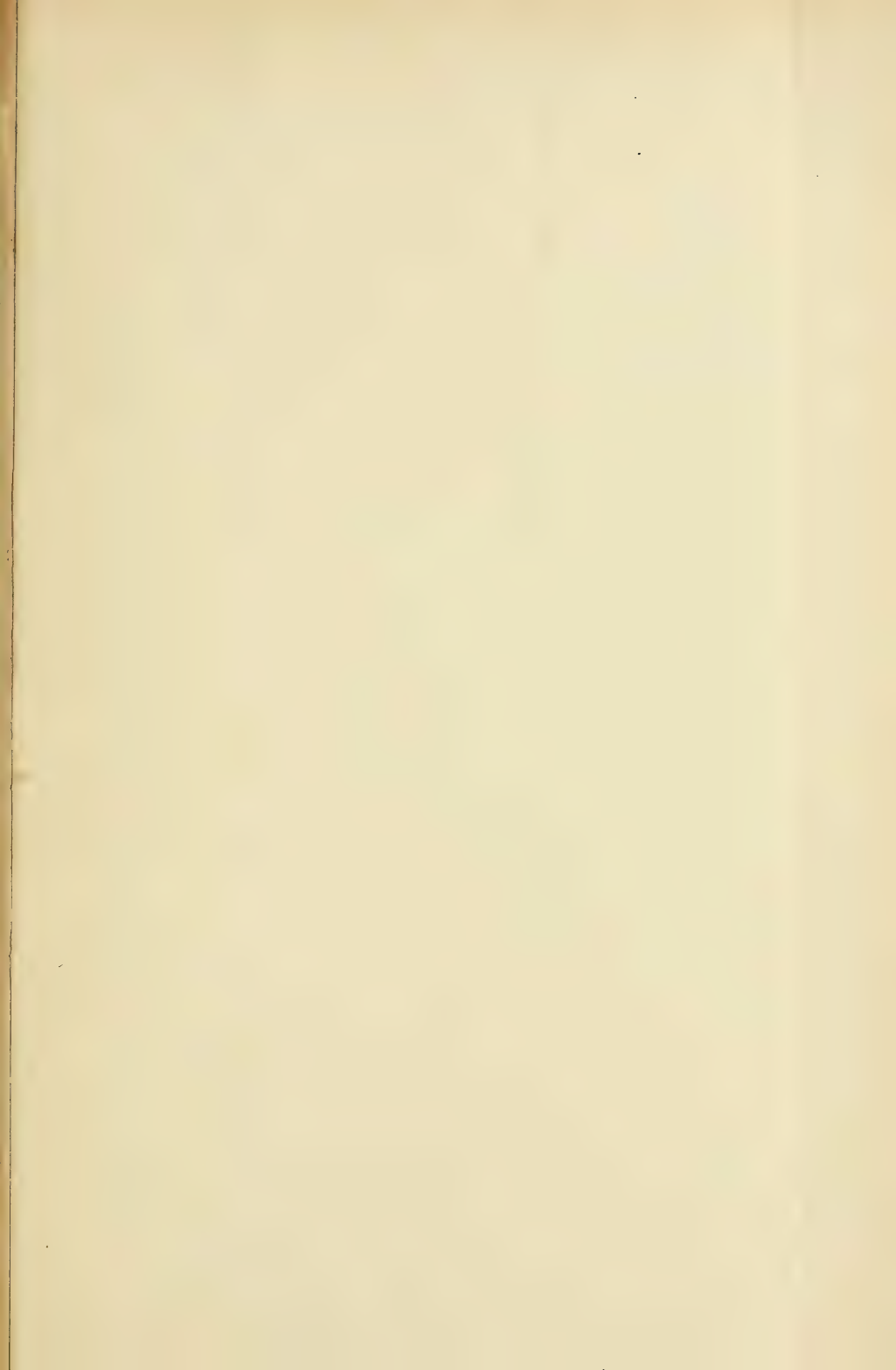
Col. 1.

θελόντων
 περιπατεῖν
 στολαῖς· καὶ φι
 λούντων ας
 πασμοῖς ἐν ταῖς
 ἀγοραῖς· καὶ πρῶ
 τοκαθεδρίας
 ἐν ταῖς συναγω
 γαῖς καὶ πρῶ
 τοκλίσιας ἐν
 τοῖς δεῖπνοις·
 Οἱ κατεσθίουσι
 τὰς οἰκίας τῶ
 χηρῶν καὶ
 προφάσει μα
 κρὰ πρός ἑῶν
 ται· οὐ τοιλή
 νονται πε
 ρὶ σφόδρον κρι

Col. 2.

μα· ἀναβλέ
 ψας δὲ εἶδεν τοὺς
 βάλλοντάς τὰ
 δῶρα αὐτῶν
 εἰς τογαζοφύ
 λακείον πλοῦ
 σίου· εἶδεν
 δετῖνα χηρὰ
 πενήτην·
 βάλλουσαν ἐκεῖ
 δ' ὅλεπτά·
 Καὶ εἶπεν ἅλη
 θως λέγω
 μιν· ὅτι ἡ
 χήρα ἡ πτω
 χὴ ἀγτηπλεῖ
 ὀν πάντων
 ἔβαλεν· ἅπαν
 τες γὰρ οὐτοι·

[Luke xx. 46—xxi. 4.]



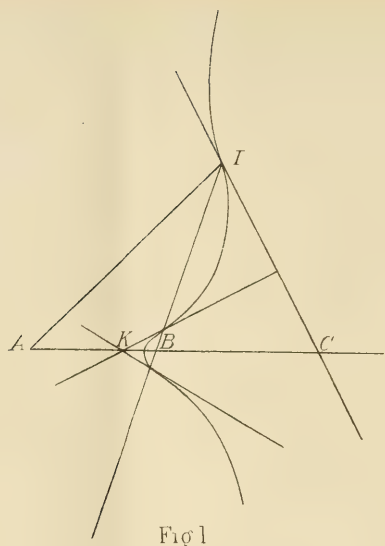


Fig 1

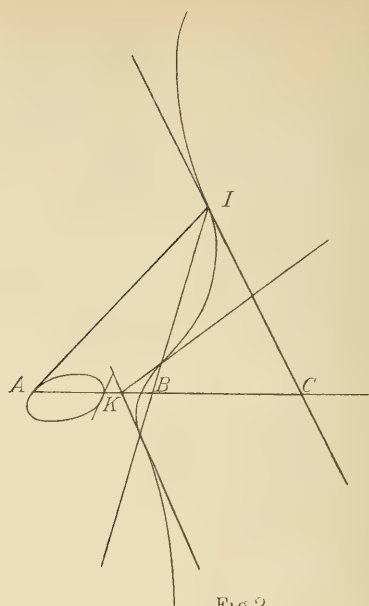


Fig 2

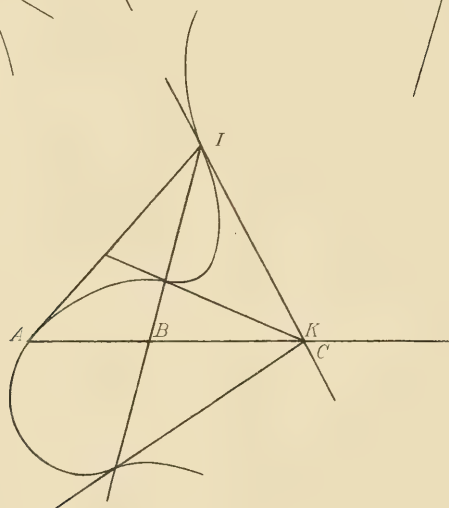
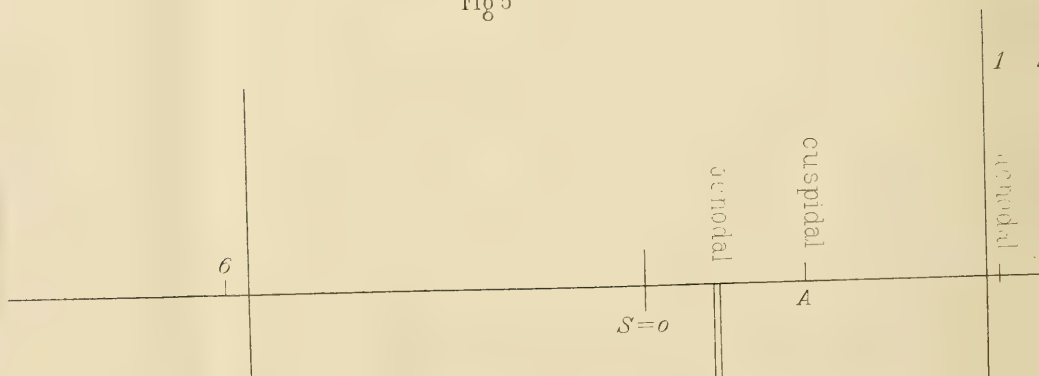


Fig 5



K here, real inflexional tangents do not overlap

K here, cubic is bipartite.

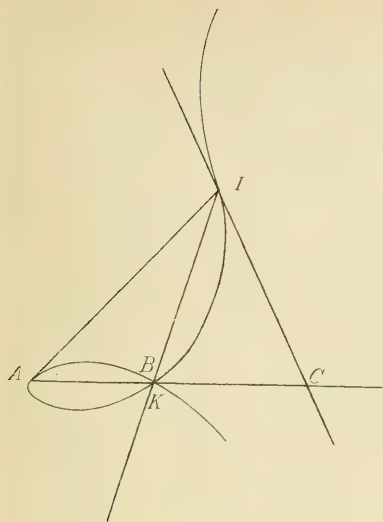


Fig 3

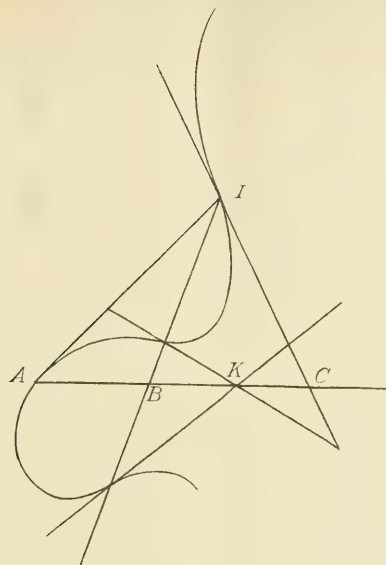


Fig 4

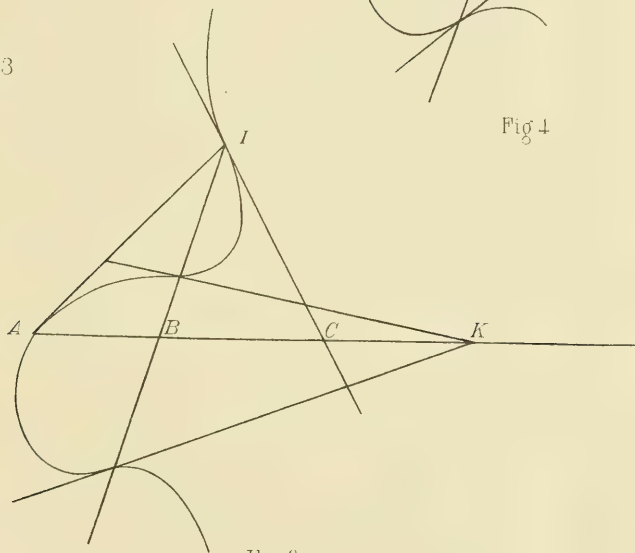


Fig 6

4

S is positive, T is negative

K here, the real inflexional tangents overlap.

5
∞
C
S=0
||

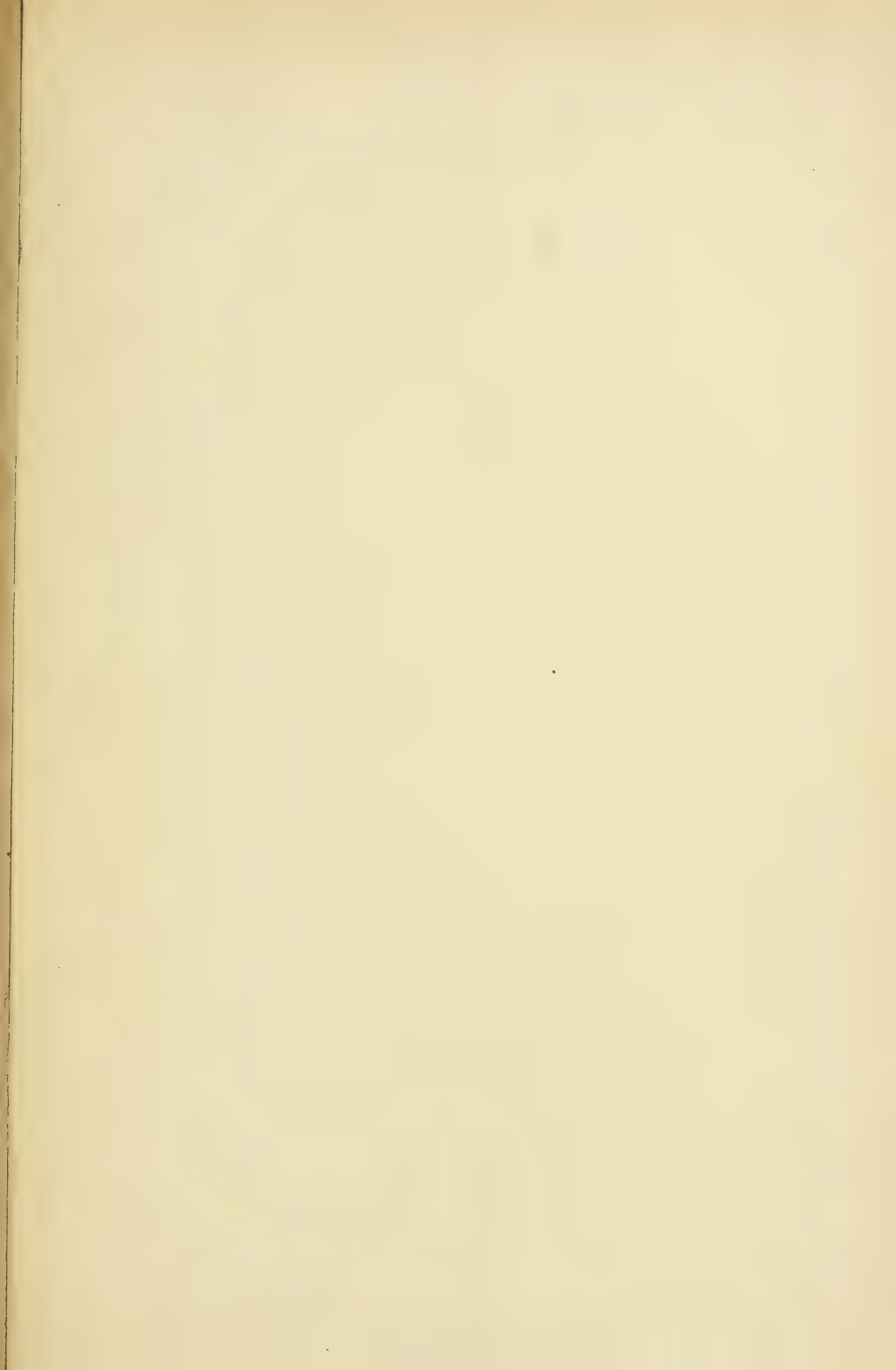
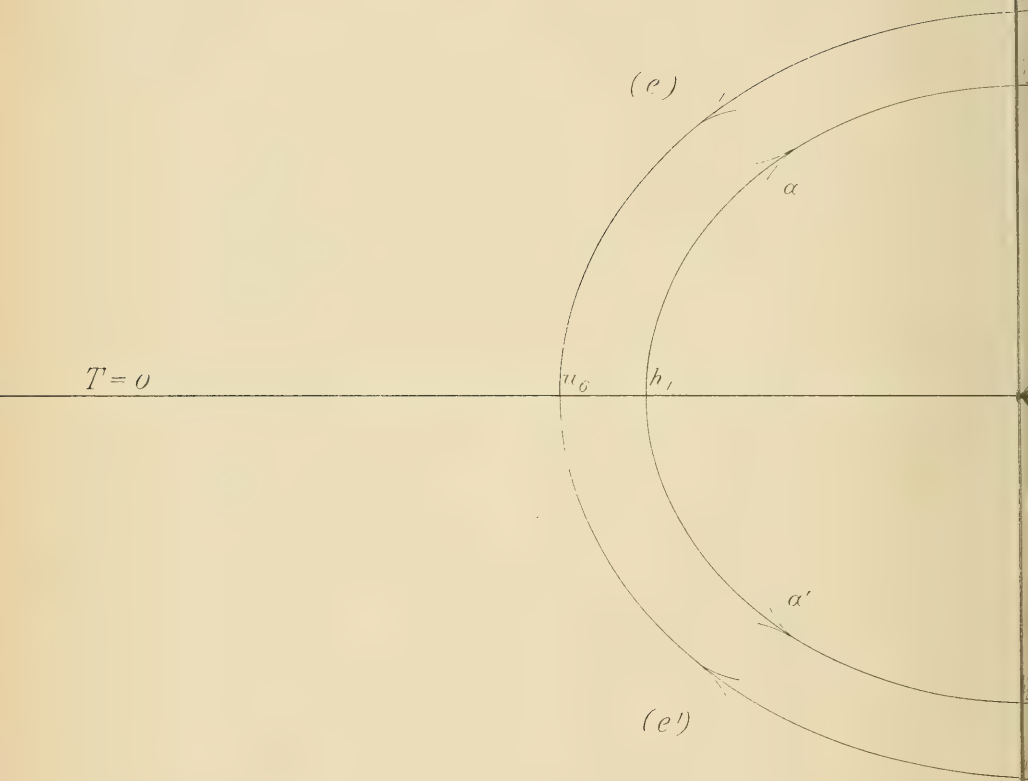
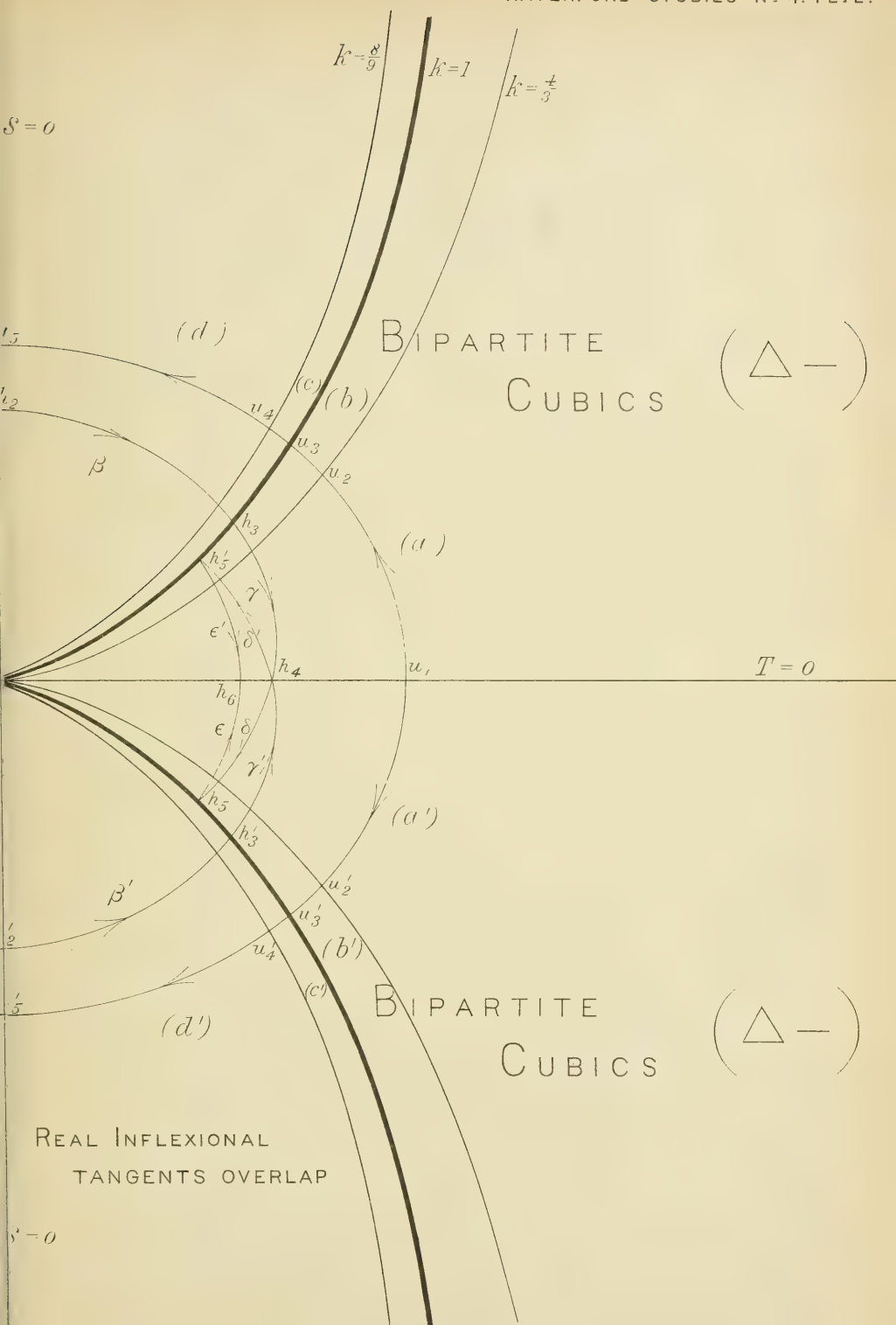


Fig. 8.



$S = 0$



HAVERFORD COLLEGE STUDIES

Published by the Faculty of
HAVERFORD COLLEGE.

No. 5

Price \$1.

CONTENTS.

PAGE

The Diatessaron of Tatian, a Preliminary Study. J. Rendel Harris .	1
--	---

To obtain copies of this publication address the Secretary of Haverford College, Haverford College P. O., Pa.

THE DIATESSARON OF TATIAN.

BY

J. RENDEL HARRIS.

I. TATIAN.

THE present tract offers itself as a study of the work of a famous Church writer of the second century, whose direct influence over the men of his day must have been very great, if we may judge from the circle of holy acquaintance in which he moved, and the disciples that attached themselves to his teaching; and whose indirect influence over the Church at large by means of the edition of the Gospels which he brought out, to say nothing of his other works, remains still an uncalculated factor of which we can hardly say less than that it must have been wide-spread, since it outlived for centuries the excommunication with which the Church visited both the man and his writings. But, while we may feel safe in regarding Tatian as one of the leading Christians of the second century, we cannot say that we know much of the details of his personal life. There is nothing that operates more powerfully as an 'oblivious antidote' in the consciousness of the early Christian centuries than an excommunication¹; and, while in modern times heresy has often been the passport to biographical honor and a certain measure of dignity, there is hardly a case of the kind in the early days; for one can hardly dignify with the name of history the scanty and often misleading notices which are found in the pages of Epiphanius and other writers on the primitive heresies, nor can we accuse these writers of the fault of excessive charity towards doubtful characters.

What we know about Tatian is, then, briefly as follows: he was

¹ I suppose Mr Hemphill to mean something of this kind when, in his *Diatessaron*, p. ix., he says that Tatian's "influence for good had outlived itself"!

a native of Assyria (by which we are to understand, in all probability, the country east of the Tigris) who came to Rome in the days of Justin Martyr. In those times the search for truth was commonly accompanied by the outward and visible sign of a pilgrim's staff; and Tatian's long outward journeyings are no inapt representation of the visits which his enquiring mind made to the various schools of Greek philosophy. He went through dry places, seeking rest and finding none. The solemn assemblies of the philosophic seemed to him to be a mere dogmatizing of one against another, and a crude venting of transitory fancies. Rhetoric was worse than philosophy, a mere hireling taking sides for a fee; and as for poetry its chief end seemed to be to glorify the amours of the gods and to secure the corruption of the soul.

We shall probably be right in referring the conversion of Tatian to Christianity to the influence of Justin, whom he met in Rome. Not only did he accept Justin as his teacher in the new faith, and imitate, in his presentation of Christianity, the method of Justin, which of itself suggests that the influence of Justin goes back into the first stages of his Christian life; but the terms in which he describes his conversion are parallel to Justin's own experience. Precisely as Justin was led by his instructor to make a careful study of the Hebrew Scriptures, so Tatian affirms that he lighted on certain barbaric writings too old to be compared with the opinions of the Greeks and too divine to be compared with their errors; and from the study of these writings he at length came to find within himself the principle of truth which he had sought without in so many quarters: and it shews something of the struggle through which he had passed, when we find him saying that, when we dig for the hidden treasure of the kingdom, we may indeed be covered with dust, but we secure it as our lasting possession.

The Address to the Greeks, the only one of Tatian's works which has survived besides the Harmony of the Gospels, gives many suggestions of the writer's experience; and although some of the methods which he employs are very foreign to our time, and some of his points sound oddly enough in the nineteenth century (as for instance when he refuses to believe a philosophy—say that of Anaxagoras—which maintains the sun to be a red-hot mass, and the moon an earth), we can readily forgive the defect of his

physics, when he tells us that the chief business of man is to seek for what we once lost, to unite the soul with the Holy Spirit, and to strive after Union with God. Nor is it to be wondered at that a man who expresses himself in this language of the Mystics should have shewn tendencies of an ascetic character, since every mystic is at some part of his career an ascetic, and in the early Church it often happened that the whole of the Christian life was made the arena of the spiritual athlete, in which he combated the foes that he found in his flesh. So that we need not be surprised that Tatian abandoned the use of wine and of flesh-meats, and that he denounced marriage, and that he wrote a treatise on the teachings of our Lord concerning Perfection.

The early fathers affirm that, as long as Tatian was under Justin's influence, no extravagance was found in him deserving of censure; and they are probably right in referring the more formal development of his views to the later part of his life. His fellowship with Justin was unbroken up to the close of Justin's earthly career; and when the machinations of the cynic philosopher Crescens were employed to revenge upon the Christian teacher the denunciation of his vile life, Tatian was, as he himself tells us, exposed to the same danger as Justin: so that we may be sure that Tatian never was excommunicated by his teacher. After Justin's death, Tatian became a prominent leader of Christian thought. Amongst his pupils were Rhodon, of whose writings some fragments are preserved, and no less a personage than Clement of Alexandria. We may conjecture that his intercourse with the latter is to be assigned to the return of Tatian to his native country Assyria by way of Greece¹. The extreme asceticism of Tatian is condemned by Clement in his writings, which is another indication that in his later life he must have become more pronounced in his views: and we may therefore say that Tatian became an Encratite (as the Ascetics of that day were named) after his return to the East, and (which is perhaps involved in the preceding term) a Gnostic. Certainly he must have accepted so much of Marcion's views as concerns the belief in a

¹ The language of Clement of Alexandria is as follows (*Strom.*, i. 1): "of these blessed men, one was in Greece, the Ionian; the other in Magna Grecia; another of these from Coele Syria, and one from Egypt: and others in the East of whom one was born in the land of Assyria, and the other a Hebrew from Palestine." He is generally understood in these last cases to refer to Tatian and Theodotus.

Demiurge, and the distinction between the Good God and the Just God, for he interpreted the sentence, "Let there be light," as a prayer made by some lesser being, some struggling Ajax of an inferior deity, to the Supreme God. He also took an extreme view with regard to the salvability of Adam, and is condemned by the fathers for not recognising that, so far from Adam being the representative lost soul, we ought rather to believe that, where sin abounded, grace did much more abound: an argument which Irenæus did not seem, in giving it, to realize as capable of an application beyond the immediate subject. We shall shew by-and-by that all of these views, or nearly all,—celibacy, disuse of wine in the Eucharist and elsewhere, Gnostic distinction of God, non-salvability of Adam,—are commented upon by Ephrem in the exposition which he made of the Tatian Harmony; and, since no personal allusion is made to Tatian throughout Ephrem's work, we can form some idea of the hold which his principles must have taken in Mesopotamia, for his work remained in circulation long after he was dead and his errors are discussed anonymously.

We may now proceed to the discussion of the Diatessaron, Tatian's Gospel-harmony, and we may observe that this work had been to all appearances lost at a very early date. At least the historical notices which we have of it are all early except those in a few Syrian writers. No attention had been paid to the Arabic codex brought by Assemani to the Vatican library more than a century and a half ago, which was said to contain a version of the Diatessaron. But as soon as Ephrem's commentary on it was made accessible in a Latin translation by Mössinger, and it was recognized that the early Syrian father Aphraates quoted it extensively, it became possible for Zahn to make a critical study of the Diatessaron and to attempt to reconstitute a part of the text mainly from Ephrem's commentary assisted by the homilies of Aphraates. Remarkable as a successful attempt at textual reconstruction, it yet gives but an imperfect idea of the text of the Diatessaron: it contains only about one-fifth of the whole work, and even that in a most fragmentary and disjointed condition, while the textual accuracy of a large portion is doubtful and tentative. This is not said in disparagement of Zahn's wonderful work, but to correct a misapprehension which seems quite current, that he has practically reconstituted the entire text. This opinion is embodied in the elaborate paper in Smith and

Wace's *Dictionary of Christian Biography*, where it is stated that he has recovered and "printed the text in detail."

On the other hand, for textual criticism, Zahn's text, as far as it goes, is far more valuable than the Arabic version. In the former we have the primitive, in the latter a reformed text. A slight comparison will make this quite clear. Tatian's original Syriac text agreed in great part with the Curetonian Syriac (*Sc.* of Zahn), and evidently preceded the Peshito (*P.*) or reformed Syriac text. This is shewn by Zahn. It is a disappointment to find that, in the case of the Arabic version, the passages where there was a substantial difference between *Sc.* and *P.* have been altered to conform to the latter. It is impossible to say exactly at what time this was done, and whether in the Syriac original or in the Arabic version. It seems, however, probable that, after the Peshito had become the authoritative text, fresh copies of the Diatessaron were made to agree with it, probably long before the ninth century, when the Syriac ms. from which the Arabic version was made, was written by a pupil of Honain.

A second textual change, also to be regretted, consisted in the omission of a large proportion of the passages introduced by Tatian into the Gospel narrative, which were either wholly apocryphal or adapted from some other Gospel passage. Most of these have disappeared from the Arabic version, probably by a process of gradual elimination, but those that still remain in Zahn's fragments are sufficient proof that their number in the original text was considerable¹.

II. THE MSS. UPON WHICH THE TEXT OF THE DIATESSARON IS BASED.

The Diatessaron of Tatian has been preserved to us in an Arabic version of which two MSS. are now in Rome; the text of these MSS. has been published by Agostino Ciasca, a well-known Orientalist and one of the guild of Scriptoris connected with the Vatican library². One of these MSS. has long been known as

¹ The obliteration of the Israelitish character of the Gospels as shewn, e.g., by the omission of the words "in Israel," "among the Israelites" &c., as noticed by Zahn, is not to be found in the Arabic version.

² *Tatiani Evangeliorum Harmoniae Arabice*. Nunc primum ex duplici codice edidit et translatione latina donavit P. Augustinus Ciasca ord. Erem. S. Augustini, Biblioth. Ap. Vat. Scriptor, Romae, 1888.

existing in the Vatican library; while the other has recently been brought from Egypt, and is now in the possession of the Museo Borgiano at the College of the Propaganda. From these Arabic MSS., which are in close textual relation with one another, Ciasca produces an edited text which may confidently be taken to represent the Tatian Harmony in the form of its first Arabic appearance, and he accompanies this text with a translation, designedly expressed, as far as might be done, in the terms of the Clementine Vulgate. It must be admitted that this method of text transference is somewhat misleading: the assumption being made that the original text of Tatian underlies the Arabic, it would be more reasonable to connect it with those earlier Latin versions, whose critical relations with the text of Tatian are certainly extremely close, by means of an apparatus criticus, even if no attempt was made to employ their modes of expression in the translation of the Arabic. It is true that Ciasca's edition does not pretend to be a critical one, and consists merely of text and translation without prolegomena, excursuses or foot-notes, mainly in order to avoid delay in the publication.

Denoting the two MSS. from which the Arabic text is taken by the signs *A* and *B* we collect the following data concerning them from the published accounts: and first in regard to MS. *A*, which, because of its completeness, forms the basis of the text though it is but carelessly written. It is not a little strange that this MS. should have waited so long for an editor, when it was definitely described more than 150 years ago by Stephen E. Assemani in the Catalogue of the Vatican Arabic MSS. (Mai, *Vet. Script. Nov. Coll.* iv. 14), amongst which it bears the number XIV., as being the very Diatessaron of Tatian. For Assemani quotes its colophon as follows: "In fine fol. 123 haec a librariis adnotata reperies: *Explicit auxilio Dei sacrosanctum Evangelium quod ex quatuor Evangeliiis collegit Tatianus, quodque Diatessaron vulgo dicitur. Et laus Deo.*" It was described with equal clearness by Joseph S. Assemani (who brought it to the Vatican library) in his *Bibl. Or.* i. 619, as *Tatiani Diatessaron seu quatuor Evangelia in unum redacta*. The MS. consists of 123 leaves of paper, written probably in Egypt, by a hand judged variously to be of the twelfth or probably of the fourteenth century. The book, especially in the earlier part, is in a bad state of preservation: one leaf is missing after fol. 17, and another after fol. 117. By a curious misunder-

standing on the part of Assemani, it was believed for a long while that this MS. commenced with the Gospel of Mark, instead of beginning, as tradition affirms of the Tatian Harmony, with the fourth Gospel. Thus, according to Assemani, the introduction stood as follows: *Exordium primum Evangelii ex Marco. Dixit Initium praedicationis Jesu Christi*: and, although the Gospel of John follows immediately upon this, the tendency of the words quoted was to obscure the identification of the text with Tatian. It was however suggested by Ciasca, in a preliminary pamphlet published some time ago¹, that the words were the gloss of a scribe, directing the reader to commence the Harmony, much in the same way as in modern churches the preface is made, "Here beginneth" in reading the lesson. According to Ciasca the words should therefore run: *Incipe exordium Evangelii ejus ex Marco. Dic: Initium evangelii Jesu Christi, Filii Dei*. This explanation turns out not to be perfectly correct, but the conjecture was verified, in so far as the statement was made that the prefixed words were not a part of the Harmony, by the recovery of the second MS. (*B*), which has them in a slightly different form at the close of a prologue to the Harmony and detached from the text. This at once suggests that the MS. *A* is, in some of its details, subordinate to, and a later form than that of *B*, a supposition which the following consideration confirms. The early tradition concerning Tatian emphatically asserts that his Harmony did not contain the genealogies of our Lord as found in Matthew and Luke. These genealogies are, however, found in the Vatican text. A reference to the text of *B* shews them, not indeed in the text, but as an appendix to the Harmony, that is to say, in the first stage of the process of insertion. Such an observation, while it establishes to a certain extent the subordinate character of the text of *A*, and vindicates the identification of the text of the Harmony with that of Tatian, awakens at once our suspicion as to the state of preservation of the text itself. It is very unlikely that MSS. which shew the absorption of such considerable interpolations (which were probably made as an appendix in their Syriac ancestor) should have remained free from those lesser and almost unconscious adaptations by which the text of a Biblical MS. is

¹ *De Tatiani Diatessaron Arabica Versione*. Cod. Vat. decimum quartum descripsit, etc. A. Ciasca, Paris, 1883. (Extract from Pitra's *Analecta Sacra Spicil. Solesm.* Vol. iv. p. 465 sqq.)

continually conformed to the received texts of the time in which it is written. We must be prepared, therefore, to find accretions and omissions in the transmitted text of the Harmony as received from the Arabic copies.

The second MS. of the Harmony (*B* of Ciasca) was presented in 1886 to the Borgian Museum by Halim Dos Galí, a Copt in communion with the Catholic Church. It consists of 355 leaves of paper, and is referred to the 14th century: the first part of the book is occupied with a prefatory dissertation on the Gospels; the Tatian Harmony being found on foll. 96^b—353. From the prologue to the Harmony, as well as from a note at its closing page, we obtain the following important information:

1. That the Harmony is the work of Tatian, called Diatessaron, or Quaternary:

2. That it was translated from Syriac into Arabic by a certain Abulfaraj¹, or, as the scribe calls him with fuller name, Abulfaraj Abdullah Ben-at-tíb:

3. That the copy used by Abulfaraj was a Syriac MS. made by the hand of 'Isa ben Ali Almottabbeb a disciple of the celebrated Abu Zaid Honain ben Ishaq.'

This Honain was a famous Syrian physician and writer in medicine, who died in the year 873, and whose headquarters were at Bagdad, at the court of the Khalifs. He was noted as a literary leader and as the head of a school of translators from Greek into Syriac and into Arabic which was very important in the development of Arabic culture. Since Almottabbeb was his disciple, we can hardly place the translation of the Diatessaron into Arabic earlier than the end of the ninth century. Further, the date of the death of Abulfaraj is given by Bar-hebraeus as A.D. 1043. The copy which he used was therefore less than 150 years old. The Diatessaron had seen 700 years of Syriac life before its translation into Arabic; and we can readily infer that the Syriac at the time of translation must have been in many points altered from its original cast. Still, the comparison with the collateral evidence is sufficient to justify us in our belief that we have here substantially the work of Tatian.

¹ To be distinguished from the later and more famous Abulfaraj (Gregorius Bar-hebraeus, A.D. 1226—1286).

III. HISTORICAL NOTICES OF THE DIATESSARON.

From what has been said, it will be seen that, in describing the MSS. from which Ciasca's text is made, we have been careful to avoid the assumption that the text of the Arabic Harmony is necessarily and at all points identical with that of the Diatessaron of Tatian. For, even if we accept the Harmony as Tatian's on the ground of its general agreement with the traditional Tatian, we are obliged to note in the MSS. themselves a tendency to change in the most striking Tatian characteristics; and further, since the Harmony is substantially a New Testament MS., it is impossible that it could have remained in circulation without being affected by the same causes which were in operation to change the form of every successive recension of the New Testament into agreement with the latest recension of all.

But this assumed liability to change, while it may be regarded theoretically as inevitable, requires to be carefully estimated by the practical comparison of the Arabic form with such portions as may be current in earlier periods, or with other Harmonies which may be traced back into the same root with it. This requires a study, in the first place, of the general descriptions given by the earlier fathers of the Diatessaron as known, more or less completely, to them; and, secondly, of the portions of the text of the New Testament current in early patristic writings which with any degree of probability are assumed to be derived from or closely related to the Harmony.

We begin with the chronological notices of the Harmony. The first of these is, we believe, found in the apocryphal Syriac work known as the *Doctrine of Addai*, a tract best known on account of the correspondence which it contains between the Lord Jesus Christ and Abgar Uchomo the king of Edessa.

A. *Doctrine of Addai* (beginning of III. cent.).

Phillips, "Moreover, much people day by day assembled and
Doct. Add. came together for prayer and for the reading of the
 c. 35, 15-17. Old Testament, and the New, the Diatessaron¹. And they believed in the resurrection of the dead."

¹ *Diatessaron* is clearly the reading of the St Petersburg MS. of the *Doctrine of Addai*; though the British Mus. MS. has the unintelligible *Ditornon*, while the Armenian, connecting with what follows, makes the people believe in the Trinity. The wide-spread corruption indicates antiquity for the true reading.

From this curious apocryphal history of the founding of the Church of Edessa, we are entitled to infer that, at the time of its composition, the use of the Diatessaron was so habitual in that city that the writer of the legends had no idea of the prevalence of any other custom at an earlier time: for, if the idea had been present to him of the circulation of any such earlier gospel, he would not have made his apostles and primitive teachers gather the people together to the hearing of the Diatessaron. But this writing must be assigned to a very early period: it was translated into Armenian in the fifth century; the St Petersburg MS. of the work belongs to the sixth century, while the British Museum MS. may be even earlier; and it was translated into Greek for Eusebius in the earlier part of the fourth century. We cannot, therefore, assign it to a later date than the close of the third century: and, since a large part of a century must be allowed for the growth of the tradition in the Church as to the use of the Harmony by the apostolic men who brought Christianity to Edessa, we are obliged to regard the passage quoted above as evidence for the circulation of the Diatessaron in Edessa at a time very soon after that of its composition. We may verify this by another consideration. In the original document there stood these words of Addai: "Blessed are ye that have believed in me, not having seen me: and, because ye have so believed in me, the town in which ye dwell shall be blessed and the enemy shall not prevail against it for ever." Now it seems almost certain that such predictions could hardly have been referred to the Lord in the time immediately following the year A.D. 217, when Edessa was devastated by the Romans; and perhaps this date may be an inferior limit to the time of production of the Doctrine of Addai, and, *à fortiori*, to the date of production of the Diatessaron. This takes us back to the time of Tatian himself.

B. *Eusebius, Hist. Eccl.*, IV. 29, 6 (A.D. 264—340).

Ὁ μέντοι γε πρότερος αὐτῶν ἀρχηγὸς ὁ Τατιανὸς συνάφειν τινα καὶ συναγωγὴν οὐκ οἶδ' ὅπως τῶν εὐαγγελίων συνθεῖς, τὸ διὰ τεσσάρων τοῦτο προσωνόμασεν ὃ καὶ παρὰ τισιν εἰσέτι νῦν φέρεται.

"The former leader of the Encratites, Tatian, composed somehow a kind of combined and concurrent gospel and called it the Diatessaron, a work which is still circulated in some quarters."

It is not quite easy to tell how much acquaintance, on the part of Eusebius, with the text of the Diatessaron may be inferred. His language seems to imply a want of approbation of Tatian's method, but has been interpreted to mean total ignorance of his work¹. If the last were the true interpretation, it would not only militate strongly against the existence of a Greek Diatessaron, but would require us to believe that the Diatessaron in Syriac was circulated entirely, or almost entirely, in the Euphrates Valley, for Eusebius could hardly have been unacquainted with a Syriac book commonly current in Palestine. Of one thing we may be certain; that in the time of Eusebius the Diatessaron was already under censure and in process of elimination from the Churches; otherwise he could not speak of its being *still* circulated in some quarters. And, if under censure in the time of Eusebius, it looks as if this were the result of an indiscriminating antagonism to Tatian's writings generally; for it is not easy to see why a simple harmony of the Gospels should provoke hostility, even if an occasional apocryphal sentence be found therein. There is hardly any period in the history of the Church when some one has not been combining or harmonising the narratives of the four Gospels: nor would the Church normally visit such efforts with censure.

C. *Epiphanius, Heresies*, 46, 1. (A.D. 320—402.)

λέγεται δὲ τὸ διὰ τεσσάρων εὐαγγέλιον ὑπ' αὐτοῦ γεγενῆσθαι, ὅπερ κατὰ Ἑβραίους τινὲς καλοῦσι.

"They say the Diatessaron Gospel owes its origin to Tatian, some people call it the Gospel according to the Hebrews."

What Epiphanius means, by suggesting an identification between the Diatessaron and the Gospel according to the Hebrews, is not very plain. The confusion may have arisen, (*a*) by a reflection that since the Encratites used the Gospel according to the Hebrews, and Tatian had joined himself to them, his Syriac compound Gospel must be the same as theirs; or (*β*) because Tatian may have made use of passages found in the Gospel of the Hebrews, so that the transference of the singularities of that Gospel invited a misunderstanding as to the nature of the Har-

¹ According to Lightfoot (*Cont. Rev.*, 1877, p. 1136: *Essays on Supernatural Religion* 1889, p. 278): "It is not ignorance of the contents, but disparagement of the plan of Tatian's work, which the expression of Eusebius implies."

monised Gospel on the part of superficial readers; or (γ) it may mean nothing more than that one Syriac (or Hebrew) Gospel was mistaken for another, which was current in some neighboring region of the East. Of these alternatives the second stands without support; no passage which tradition assigns to the Gospel of the Hebrews having been clearly demonstrated to be absorbed in the Harmony: the third alternative seems hardly a strong enough explanation: the first is, however, an adequate hypothesis for the facts of the case; nor would it be inconsistent with our second hypothesis, viz., the use of the Hebrew Gospel in the Harmony, if such use could be clearly proved. If Tatian made his harmony after he joined the Encratites, he would be very likely to transfer something from their favorite text; but this point is not yet clear; the Harmony, as we have it, is singularly free from anything bordering on Gnostic Asceticism.

D. *Rabbula*, Canons of Edessa (A.D. 412—435).

Zahn quotes from amongst the Canons of Rabbula, bishop of Edessa, the following rule:

“Let the presbyters and deacons have a care that in all the churches there be provided and read a copy of the distinct Gospel”
(ܠܚܝܬܐܢ ܥܕܝܬܐܢ).

This distinct Gospel is the antithesis to the compiled Gospel, and the Canon is an enforcement of the same rule which we shall presently find Theodoret putting in operation, viz. the expulsion of the Diatessaron and the introduction of the separate Gospels. This is the reason why, in the Syriac Gospels of Cureton, the first gospel is marked with the singular title, “Distinct Gospel of Matthew”; and not, as Cureton imagined, because it was in any way detached in historical development from the other Gospels. The use of the expression shews that the Cureton copy (the MS., not the Version) is an antidote to another gospel which was current when it was written. The fact that the Diatessaron was really a Church Lectionary comes out also from the fact that the Arabic Version still presents it to us as divided into 55 sections, for the Sundays and chief feasts of the Ecclesiastical year, much in the same way as the Pentateuch is divided by the Jews.

E. *Theodoret*, De fab. haer. (A.D. 453.)

Οὗτος τὸ διὰ τεσσάρων καλούμενον συντέθεικεν εὐαγγέλιον, τὰς τε γενεαλογίας περικόψας καὶ τὰ ἄλλα ὅσα ἐκ σπέρματος Δαβὶδ κατὰ σάρκα γεγεννημένον τὸν κύριον δείκνυσιν. ἐχρήσαντο δὲ τούτῳ οὐ μόνοι οἱ τῆς ἐκείνου συμμορίας, ἀλλὰ καὶ οἱ τοῖς ἀποστολικοῖς ἐπόμενοι δόγμασι, τὴν τῆς συνθήκης κακουργίαν οὐκ ἐγνωκότες, ἀλλ' ἀπλούστερον ὡς συντόμῳ τῷ βιβλίῳ χρησάμενοι. εὗρον δὲ καὶ γὰρ πλείους ἢ διακοσίας βίβλους τοιαύτας ἐν ταῖς παρ' ἡμῖν ἐκκλησίαις τετιμημένας, καὶ πάσας συναγαγὼν ἀπεθέμην καὶ τὰ τῶν τεσσάρων εὐαγγελιστῶν ἀντисήγαγον εὐαγγέλια.

"He (Tatian) composed the so-called Diatessaron by cutting out the genealogies and whatever goes to prove the Lord to have been born of the seed of David according to the flesh. And this work was in use not only among his own party but even amongst those who follow the tradition of the Apostles, who used it somewhat too innocently as a compendium of the Gospels, without recognising the craftiness of its composition. I myself found more than 200 copies in reverential use in the churches of my diocese, all of which I removed, replacing them by the Gospels of the four Evangelists."

Theodoret was bishop of Cyrus on the Euphrates, and his diocese included about 800 churches¹. If we assign a single copy of the Gospels to each church, we find one fourth of the churches reading the Diatessaron. So that in the neighborhood of the Euphrates and beyond that the Harmony must in earlier times than Theodoret have been substantially the one Gospel accepted for church use. No such phenomenon presents itself elsewhere. For once, the proverb that "a prophet is without honor in his own country" was completely falsified. But then Tatian spent most of his time in travel and in the West.

F. *Bar-ali*, Glossary. (A.D. 885.)

Payne Smith, *Thesaurus*, I. p. 869. "*Diastarsun* (otherwise *Diakutrun*): the Gospel which is the Diatessaron, made by Titianos, the compiled Gospel. A gospel made, in a general sense, on the sense of the four Evangelists (God's blessing be upon them!). It contains neither the natural nor the traditional genealogy

¹ Theod., *Ep.* 113.

of our Lord Christ: and he who made it (Titianos) has on that account been anathematised."

G. *Bar-Bahlul* (latter half of Xth century).

A Syriac lexicographer of this time and name gives us the following notice: "*Diatessaron*, that is to say, the Gospel compiled from the four Evangelists."

In this there is no reference to the author; so that, in strictness, Bar-Bahlul ought not to be quoted amongst the historical authorities for Tatian's work. The sentence above given is taken from the oldest MS. of Bar-Bahlul's work, dated 1214 A.D.¹ Later MSS. however, quoted in Payne Smith's *Thesaurus* (p. 870), add the sentence, "and this was composed in Alexandria and was made by Tatian the Bishop." These words are taken from a notice of Dionysius Bar-Salibi or from Bar-Hebraeus to whom we shall presently refer, and it will not be necessary to explain twice over the confusion into which the lexicographers have fallen.

The name "the compiled Gospel," which is probably the old Syriac twin-term with *Diatessaron*, suggests acquaintance on the part of Bar-Bahlul with the book itself: and the more so, since, as Zahn² has pointed out, he uses the corresponding term, "the distinct Gospel," to describe the Gospel of Matthew. For he says (on Matth. xxvii. 16) that in this passage "This Bar-abba is called Jesus. So it stands written in the distinct Gospel." The Curetonian text is missing at this point, or we should probably be able at once to verify the gloss which gives a well-known and remarkable ancient reading ("Jesus Bar-abba or Jesus who is called Messiah?").

H. *Dionysius Bar-Salibi* († later than 1207 A.D.).

In his Commentary on the Gospels³, he writes:

"Tatian, the disciple of Justin the Philosopher and Martyr, selected from the four Gospels and patched up and made a Gospel and called it *Diatessaron*, that is to say, the Compiled: and this work Mar Ephrem commented on. Elias of *Salamia*, who is also called Aphthonius, made a Gospel on the model of the *Diatessaron*

¹ MS. *Socin.*, I.

² *Tatian*, p. 105.

³ Assemani, *Bibl. Or.*, I. 57: II. 159.

which Ammonius had made, to which Eusebius alludes in the introduction to the Canons which he gave to the Gospel. But Elias sought for that Diatessaron and could not find it, and so he made another, taking it for his model. And Elias finds fault here and there with the Canons of Eusebius, and points out errors in them, and with good reason. The copy which Elias made is not easy to come at."

The writer distinguishes three Diatessarons, all of which were until recently supposed to be lost. The first is Tatian's, of which he speaks somewhat scornfully as if he were drawing his information from Eusebius, but at the same time adding the important information which he could not have derived from Eusebius, that Ephrem had made the text of the harmony the groundwork of a Commentary. This information is of the highest value, and has been verified by the recovery of the actual commentary of Ephrem.

The second harmony is the one mentioned by Eusebius as the work of Ammonius of Alexandria. Bar-Salibi knew little of it, and we hardly know more: it may, however, some day be found.

The third, that of Elias of *Salamia*, is, I believe, only known from this passage. Even in the time of Bar-Salibi, it was rare to find a copy.

I. *Gregory Bar-Hebraeus* († 1286).

Bar-Hebraeus, in an introduction which he makes to his *Scholia* on Matthew¹, writes as follows:

"When Eusebius of Caesarea saw the confusion which Ammonius of Alexandria had made in the Gospel, that is the Diatessaron, the compiled Gospel whose beginning is, 'In the beginning was the Word,' and Mar Ephrem has expounded it; he preserved the four Gospels in the integrity of their form, but pointed out the agreement of the words by Canons written in red."

The language shews that this is derived from Eusebius and Dionysius Bar-Salibi: only the writer confounds two of the Diatessarons mentioned by Bar-Salibi, and describes Tatian's as though it were that of Ammonius, while he makes a further blunder in raising the author of the Harmony to the Episcopate.

¹ Assemani, *Bibl. Or.*, I. 57.

J. *Ebed-Jesu* (beginning of cent. XIV).

This writer describes correctly the Harmony of Tatian, whose labors he makes the model of his own: but he falls into an apparent confusion between Tatian and Ammonius, into which he may have been led by Bar-Hebraeus. The passages in which he refers to the Diatessaron are as follows:

Mai, *Script. vet. nov. Coll.*, x. 191: "When Tatian, a certain philosopher, had comprehended intellectually the meaning of the utterances of the Evangelists, and had fixed in his mind the object of their divine work, he collected from the four of them that admirable work which he called the Diatessaron, in which, while following most carefully the right order of the words and deeds of the Saviour, he did not add a single sentence of his own."

Cf. also Assemani, *Bibl. Or.*, III. 1, 12: "The Gospel which an Alexandrian of the name of Ammonius collected (he is also called Tatian) and named it the Diatessaron."

From Ebed-Jesu's remark about Tatian's caution in compiling the harmony, we can almost infer that he used some such copy as our Arabic text gives, in which Tatianisms (if one may coin the word) have been reduced almost to zero. It is remarkable that, as Tatian's text became accommodated to the accepted versions, he himself seems to have recovered his ecclesiastical reputation.

K. *A scholion in Ev. 72* (XIth cent.).

This ms., one of the Harley Codices in the British Museum (No. 5647), has been brought forward in connection with Tatian on account of a scholion which is found on its margin over against Mt. xxvii. 49.

^η
σ' ὅτι εἰς τὸ καθ' ἱστορίαν εὐαγγέλιον Διαδώρου καὶ Τατιανοῦ
καὶ ἄλλων διαφόρων ἀγίων πατέρων· τοῦτο προσκεῖται·

^η
σ' "Ἄλλος δὲ λαβὰν λόγχην ἔνυξεν αὐτοῦ τὴν πλευράν· καὶ
ἐξῆλθεν ὕδωρ καὶ αἷμα· τοῦτο λέγει καὶ ὁ Χρυσόστομος.

These notes (*σημειώσεις*) have provoked much comment, inasmuch as they proffered an explanation of the presence in many early copies of Matthew (at the close of c. xxvii. 49) of words describing the piercing of the Saviour's side: "But another taking a spear pierced his side and there came out water and blood."

The Annotator says that it was found so in the historical gospel of Diodorus, Tatian, and other holy fathers; and that Chrysostom says the same. The testimony is obviously incapable of verification inasmuch as neither in the Arabic nor the Armenian does the passage in John follow here. Probably it was a guess on the part of the Annotator, who referred to the Diatessaron of Tatian, as the most natural cause to explain a displacement: but his suggestion may have been quite wide of the mark. Possibly we are to understand *Διαδώρου* as a mis-read abbreviation for *διατεσσάρων* = *διαδ̄*, for we know of no historical gospel of Diodorus, although the well-known Diodorus of Tarsus wrote a commentary on the gospels, now lost. The reference of the writer to Chrysostom is probably a misunderstanding caused by a hasty reference. The writer can hardly be taken therefore as an authority for anything in Tatian. Dr Burgon, in his *Last Twelve Verses of Mark* (p. 316), has unfortunately stamped his approval too definitely on this scholium: "Not only is the testimony of the critical fact abundantly sufficient, but the proposed solution of the difficulty, in itself the reverse of improbable, is in the highest degree suggestive as well as important. The circumstance before us is *the only thing we know for certain* about the text of Tatian's (miscalled) harmony." The italics are Dr Burgon's!

IV. QUOTATIONS FROM THE DIATESSARON.

A. *Doctrine of Addai.*

Passing from the direct or indirect historical references to the Diatessaron in early writers, we ask what quotations from the Tatian Harmony may be considered as fairly identified. Naturally, our first thought will be that we should most likely find such quotations in Syriac writers, and especially in such as flourished before the edition of the Syriac Vulgate, or before that text had thoroughly established itself in public favor. For instance, we have shewn that the Doctrine of Addai makes reference to the use of the Diatessaron in the city of Edessa, and implies no knowledge of any other gospel as current in that city: and we may therefore reasonably expect that the scriptural references in the Doctrine of Addai are references to the Diatessaron. This is a matter capable of being tested: we shall shew, later, traces of

remarkable apocryphal readings found in the Doctrine and in the Diatessaron. But, without referring to these, we may examine some simple Scripture references in the Doctrine of Addai, and compare them with the Harmony. Take the following passage for example:

“Abgar commanded them to give to Addaeus silver and gold. Addaeus said to him: How can we receive that which is not ours? For, lo! that which was ours have we forsaken, as we were commanded by our Lord to do: because without purses and without scrips, bearing the cross upon our shoulders, were we commanded to preach His Gospel in the whole creation.”

The last words certainly contain a reference to the 15th verse of the last chapter of Mark: “Preach the Gospel to every creature,” and we are sure that the last twelve verses of Mark were found in the Diatessaron, for they are in Zahn’s reconstructed text, in the modern Arabic Harmony, in the old Cureton Syriac, and in other early Syriac monuments which use the Diatessaron or are related to it. There are other references of a less certain character, such as perhaps Luke xxii. 35: “I sent you out without purse and scrip,” where the Diatessaron has the plural, ‘purses and scrips,’ just as the Doctrine of Addai.

Again, take the following passage:

“And he said to them: Because the gate of life is strait and the way of truth narrow, therefore are the believers of the truth few.” Here the passage quoted is Matth. vii. 14. The text which the writer used contained therefore the sentences: “Strait is the gate and narrow the way which leadeth unto life, and few there be that find it.” Now the words “the gate” are omitted by a group of early authorities, and were accordingly bracketed as doubtful by both Lachmann and Tischendorf. The Diatessaron, however, has them. The present case is not so good as the previous one, because there was really no sufficient ground on which to base a rejection of the words from the text, or even a hesitation with regard to them. Several other references may be found in the Doctrine, all agreeing with the Diatessaron with sufficient closeness; nor is there any reference, so far as I know, to invalidate the hypothesis, that the Gospel of the author of the Doctrine of Addai was the harmonised Gospel of Tatian. More striking instances will be found later on.

B. *Aphraates the Persian* (c. 340 A.D.).

Aphraates of Farad, better known as Mar Yakub, was bishop of Nisibis (?) and Abbot of the convent of St Matthew near Mosul, and, according to Zahn, is one of the chief Patristic authorities for the Diatessaron.

His homilies, comprising an alphabetically ordered series of 22 sections, were written about the year 336 A.D., and a supplementary 23rd homily was added in the year 345. From these homilies we may extract large portions of the Gospel as used by Aphraates, and determine the relative order of many parts of that Gospel. The first 22 homilies are based upon the text of the Diatessaron. We may test this in various ways. In the first place, the general sequence of the narrative may be examined. Before the complete Harmony came to light, this was done by Zahn, who detected the following sequence in a summary of our Lord's sayings and doings, as given by Aphraates: against each detail we will set its place in the Diatessaron.

<i>Aphraates.</i>	<i>Diatessaron.</i>
1. Sermon on the Mount :	Ch. VIII, IX, X.
2. First case of healing (the Centurion's son) :	Ch. XI.
3. Stilling of the Storm, and expulsion of the legion of devils :	Ch. XII.
4. Healing of Jairus's daughter, and of the woman with the issue :	Ch. XII.
5. Healing of two blind men :	Ch. XII.
6. Sending out of the Apostles :	Ch. XII.
7. The woman who was a sinner :	Ch. XV.
8. Of the cost of building a tower :	Ch. XV <i>fin.</i>
9. Expulsion of the devils and purifying of the house :	Ch. XVI. <i>init.</i>
10. Parables of the Sower and the treasure hid in the field :	Ch. XVI.
11. Attempt to throw Jesus headlong :	Ch. XVII.
12. Feeding of the 5,000 :	Ch. XVIII.
13. The Canaanite woman :	Ch. XX.
14. Healing of the man with an impediment in his speech :	Ch. XXI.

- | | | |
|-----|--|-----------------------|
| 15. | Healing of blind men : | Ch. xxiii. |
| 16. | Transfiguration : | Ch. xxiv. |
| 17. | Healing of the lunatic lad : | Ch. xxiv. |
| 18. | Warning not to despise these little ones : | Ch. xxiv. |
| 19. | The man with an infirmity of 38 years' standing : | Ch. xxii. |
| 20. | The rich young man receives counsel as to perfection : | Ch. xxviii. |
| 21. | The rich man and Lazarus : | Ch. xxix. |
| 22. | The workers sent into the Vineyard : | Ch. xxix. <i>fin.</i> |

In every case, except No. 19, the order followed is that of the Diatessaron: observe the place occupied by the attempt of the Nazarenes to throw Jesus headlong, which is far beyond the place to which it is usually assigned by Harmonists. It certainly looks as if Zahn were right in his general statement, that Aphraates used a Harmony, and that this Harmony was that of Tatian.

But we may also take a continuous passage in Aphraates and subject it to examination. Let us take the one quoted by Zahn (p. 76), the story of the rich young man. We will place the Arabic Harmony side by side with the Homily :

*Aphraates.**Tatian: Arabic.*

"What shall I do that I may inherit eternal life?	<i>Mark</i> x. 17.	18.	"Good Master, what shall I do that I may have eternal life? Jesus said unto him: Why callest thou me good? none is good save one, God.
The Lord said unto him: Do not commit adultery, Do not steal,	<i>Mark</i> x. 19.	18.	Thou knowest the commandments. If thou wilt enter into life, keep the commandments. The young man said unto Him, What commandments?
and honour thy father and thy mother and love thy neighbour as thyself: The young man said unto him: Thus have I done, since I was	<i>Matth.</i> xix. 19.	20.	Jesus said unto him: Do not commit adultery; Do not steal, Do not kill, Do not bear false witness: Honour thy father and thy mother and love thy neighbour as thyself. The young man said unto him, All these have I kept from my youth:

a boy. But what lack I?
 Then Jesus looked upon him
 lovingly and said,
 One other thing is lacking to thee:
 If thou wilt be perfect, go,
 sell all that thou hast
 and give to the poor,
 and take up thy cross and
 follow me. And that man,
 when he heard, became
 very sorrowful and went
 away gloomy to his house,
 because he was very rich
 in possessions. And Jesus
 said: See
 how hard it is for those
 who trust in their possessions
 to enter into the kingdom
 of heaven."

Mark
x. 21.

Matth.
xix. 21.

22.

Luke
xviii. 23.

24.

Mark
x. 23.

What lack I yet? But Jesus,
 having looked upon him,
 loved him, and said to him;
 If thou wilt be perfect,
 one thing is lacking to thee,
 go, sell all that thou hast,
 and give to the poor and thou shalt
 have treasure in heaven:
 and take thy cross and
 follow me. At this word
 the face of the youth became
 austere, and he went away
 sorrowful; for he was
 very rich. But Jesus seeing
 his sorrow, looked towards
 his disciples and said to
 them, How hard it is for
 those who have monies,
 to enter into the kingdom
 of God."

It will be observed that the order in Aphraates is closely that of the Harmony: he transposes two clauses in Matth., xix. 21: and in the last sentence he gives "those who trust in riches," for "those that have riches," as though he had a different text to the Harmony: but this is not the case, for the reading of Aphraates is the early Western text in Mark, x. 24, which follows almost immediately in the Harmony. We may say, then, that there is a close agreement between the text of the Harmony and the text that underlies the Homilies of Aphraates. Perhaps the connection will be clearer if we draw attention to one or two singular passages. Let us compare *Diat.* xxix. = Luke xvi. 28 with the following from Aphraates: "That he may go and testify to them and so they may not sin and also may not come into this torment."

Now the Arabic Harmony has "Let him go, lest they also sin and come into this place of torment."

We observe that there must have been a primitive error in the Greek text, according to which the words ὅπως διαμαρτύρηται by a confusion with διαμαρτάνω became read "that they may not sin" as we have it in the harmony and with a correction and subsequent conflation in Aphraates. And no other evidence, as far as I know, is forthcoming for the existence of the reading.

Or take *Diat.* xxxii. = John ii. 21 where we have in the

Arabic, "But he spake of the temple of his body: for when they should destroy that he would raise it in three days."

The last sentence, which is thoroughly characteristic of a Harmony for popular use, has happily escaped excision in the Arabic Harmony and is certainly genuine Tatian.

Now in Aphraates we find: "And his disciples understood that he spake of his body, in that he would, after they had broken it, raise it up in three days."

Coincidences of this kind are the best evidence of the relation between the texts in question.

C. *S. Ephrem the Syrian* (373 A.D.).

Among the later historical notices of the Diatessaron, we find the statement that Mar Ephrem commented upon the text of the Diatessaron; and this statement has been confirmed in a remarkable manner by the recovery of the very work of Ephrem to which allusion has been made.

In the year 1862, Lagarde, in issuing his text of the Apostolic Constitutions, remarked as follows, at the close of his preface: "We have not a few of the works of S. Ephrem the Syrian in an Armenian translation, published at Venice in four volumes in the year 1836, which are denounced as supposititious with a hardihood exactly proportional to the critic's ignorance of Armenian. In vol. II. 5—260, will be found a commentary upon a harmony of the Gospels, beginning with the passage John i. 1, so that it may be easily discerned upon what sort of a harmony the commentary of Ephrem was based, as I shall presently undertake to shew."

These words seem to have attracted almost as little attention as the published works of Ephrem in the Armenian dress: and yet could anything have been much more significant? A harmony of the Gospels in Syriac, and commencing with the fourth Gospel! The works of Ephrem to which Lagarde alluded were produced from the press of the Armenian monks of the monastery of S. Lazaro near Venice, to whom we are indebted for so many other early pieces, now extant only in the Armenian language.

In the year 1876, Professor George Mössinger of Salzburg re-published the commentary of Ephrem in a Latin translation which was an emendation of one made by Aucher, the editor of Ephrem, with an introductory preface shewing that the underlying

and accompanying Biblical text was the Harmony of Tatian. By the aid of this valuable work, it became possible, even for those unacquainted with the Armenian tongue, to re-construct for themselves large parts of the Tatian Harmony. We learn also, from Möisinger's collection of authorities for the statements made as to the commentary of Ephrem on the harmonised Gospels, that this work must have been current, not only in the Syriac from which the Armenian was made, but also in a Greek version, for extracts from it are current in Greek in certain MSS. of the Vatican library¹. It is difficult to believe, therefore, that the commentary of Ephrem and the Diatessaron of Tatian can have wholly perished from the Syriac language, when they were once in such demand; and we cannot help suspecting that the Diatessaron may even now be lying on the shelves of our great libraries, disguised perhaps as a lectionary, especially since so many lectionaries begin with the fourth Gospel.

It was this work of Möisinger, then, that prepared the way for the valuable researches of Zahn², who by a skilful combination of this work of Ephrem with the earlier Syriac writers succeeds in restoring approximately large parts of the Tatian Harmony to their proper order and context, so that we can very nearly judge, without the Arabic Harmony, what sequence Tatian followed, what passages he omitted, and what additions his text shews when compared with later texts. According to Möisinger, we are to ascribe this work of Ephrem to the year 364 A.D., on account of reference made in it to the desolate and distracted condition of the Church of Edessa after the expulsion of their bishop Barses by the Emperor Valens in order to place an Arian bishop in the vacated see. Zahn, however, has shewn that the date of the banishment of Barses is not susceptible of such exact determination, and regards it as probable that the year 373 is a more exact date for the persecution of the Church at Edessa consequent upon the expulsion of their Bishop. We have accordingly given this date for the production of Ephrem's commentary; and the allusions to the state of Edessa under the name "this city" render it certain that the place of publication was exactly the place where we should have expected the commentary

¹ According to Assemani, *Bibl. Or.*, i. 157, in codd. Vat. gr. 663, 733, et 1190.

² Zahn, *Forschungen zur Geschichte des Neutestamentlichen Kanons*, Theil i. Tatian's Diatessaron: Erlangen, 1881.

on the Diatessaron to have shewn itself, if the most popular Bible text had been selected as the basis of the commentary. By the year 373, however, there must have been other textual influences at work. Dr Hort points out the fact of the revision of the old Syriac version of the Gospels, and the introduction of the Peshito (or Vulgate Syriac). His words are important¹: "two facts render it highly probable that the Syriac revision was instituted or sanctioned by high authority, personal or ecclesiastical: the almost total extinction of old Syriac MSS. contrasted with the great number of extant Vulgate Syriac MSS.; and the narrow range of variation found in Vulgate Syriac MSS., so far as they have yet been examined. Historical antecedents render it tolerably certain that the locality of such an authoritative revision, accepted by Syriac Christendom, would be either *Edessa* or *Nisibis*." Now it will hardly be likely, if such a revision had gone on (completed before 350 according to Dr Hort), that no traces of it should be felt in the quotations of Ephrem; and, as a matter of fact, three times in his commentary he expressly quotes a certain "Graecus" as against the text of Tatian; in which passages he is probably referring to the Peshito which has been revised by means of the Greek, much in the same way as in his commentaries on the Old Testament he calls his authority the *Iaunâjâ* or Greek version, though he is supposed to have been unacquainted with Greek. We must be prepared, therefore, to make some allowance for this influence in our analysis of the text of Ephrem. The same cause, which we just begin to feel in Ephrem, operated finally to produce a revised text of the Diatessaron, such as we find in the Arabic version.

There is another point that must be kept in mind in handling the commentary of Ephrem: it may be shewn that Ephrem was perfectly aware of the origin of the work upon which he was occupied. For he goes out of his way to make a peculiarly unfair attack upon the Encratites, with their bread-and-water Eucharist, in his comment on the departure of Judas from the supper-table. For he represents our Lord as dipping the bread which he gave to Judas in water, and he says²: "The Lord separated Judas from the disciples by means of the water when he gave him bread dipped in water, because he was not worthy of that bread which

¹ *Introduction to N. T.*, p. 136.

² Ephrem, *Concord.*, p. 221.

was given along with wine to the twelve [read *eleven*] apostles." Here, then, we have a direct attack on the Encratites¹. But these sentences did not carry with them a condemnation of Tatian's Harmony, as some writers have supposed, for, in that case, Ephrem would have been very unlikely to have handled the book for didactic purposes. The most we can say, as a consequence of the observed blow at the Encratites in the commentary on Tatian, is that Ephrem would have been likely to omit anything which he found in the Harmony that was capable of an Encratite interpretation: or, in other words, the absence of such matter from the text of Ephrem would prove nothing as to the Harmony, if evidence of its existence in the Harmony were forthcoming from other quarters².

V. THE RELATED HARMONY OF VICTOR OF CAPUA.

The celebrated *Codex Fuldensis*, which is one of the earliest and best authorities for the text of the Vulgate version of the New Testament, contains its Gospels, not in the usual form, but harmonised into a single gospel; and this Harmony is stated by its author, Victor, Bishop of Capua, to have been based upon an earlier Harmony which came accidentally into his hands. The first question which suggested itself to Victor was that of the authorship of the work, for he had seen nothing of the kind before. From Eusebius' letter to Carpianus he learnt that Ammonius of Alexandria had made a connection between the Gospel of Matthew and the parallel passages of the other three Gospels, and that Eusebius had imitated this work in his table of Canons of Reference for the four Gospels. From the Ecclesiastical History of Eusebius he learnt, further, that Tatian had composed a continuous Gospel which he called *Diapente* (Victor having here

¹ In the same way, in describing the marriage at Cana, he says (p. 56) that by the change of water into wine He shewed Himself the Lord of creation, and by restricting that change to things already existing, as water and wine, they might understand that the thing made was not to be gnostically despised or reprobated.

On the lost piece of money he notes that it may mean that the image of Adam is compared to a drachma. This was aimed at one of Tatian's peculiar views, the non-salvability of Adam (p. 162: cf. *Iren.*, i. 28).

² It will be seen that the facts brought forward dispose conclusively of Dr Burgon's contention, that Westcott and Hort have attached the name of Tatian to a work "which does not even pretend to be his."

made some blunder between the similar terms *Diapente*, and *Diatessaron*, "Five-in-one," and "Four-in-one")¹. Was the Harmony which he had found that of Ammonius or that of Tatian? Victor inclined to the latter, though he seems to have been perplexed at the thought of such an obviously useful and meritorious work being due to a heretic; but he evidently swallowed his scruples as to whether any good thing could emanate from Encratism, and decided for Tatian. The solution was rendered more easy by the thought that the work might have been due to the earlier years when he kept close to the side of the blessed Justin and had not yet become so extreme in his asceticism. And, further, Victor seems to have argued that, in any case, the words of his Lord were not to be visited with a censure that might have lighted upon Tatian, it being sufficient to reject and discard from the Evangelic text anything which the heretic might have added by way of commentary. Accordingly, somewhere about the year 541, Victor reconstructed the Harmony on the basis of the Vulgate, and with the help of a skilful calligraphist produced one of the most splendid manuscripts that have come down to us from the early days of the Church. The verification of Victor's ascription of the ground-work of his Harmony to Tatian turns upon the order shewn by his Vulgate text, and more especially upon the order shewn by the descriptive capitulation prefixed to the same; for example, the *Codex Fuldensis* opens with Luke i. 1—4, followed by John i. 1—5: this differs from Tatian, who seems never to have incorporated the prologue of Luke. But a reference to the table of chapters shews us as follows: *Praefatio*. I. *In principio verbum · deus apud deum · per quem facta sunt omnia*. This suggests, at once, that Victor has inserted the prologue to Luke on his own account. In the same way, we can explain the presence of the genealogy of our Lord in the *Codex Fuldensis*, which certainly found no place in the Tatian Harmony, and is not mentioned in the capitulation: for, although this gives: xxv. v. *De generationem vel natiuitate Christi*, this refers more naturally to Matth. i. 18 (*Christi autem generatio sic erat*) than to the prefixed Matth. i. 1—17, "*Liber generationis Ihesu Christi*" etc.

¹ It is certain that the text of Eusebius gives *Diatessaron*, and that Victor's book was a Gospel "made up out of four." But perhaps the volume contained the Acts.

² Hence, Lightfoot's verdict in *Essays on Supernatural Religion*, p. 286, needs

But the verification of Victor's view demands a much closer examination; and when we place the two Harmonies (the Arabic Tatian and the *Codex Fuldensis*) we shall find, in the midst of frequent misplacement, such agreement in singular details as will furnish the strongest confirmation of the theory in question.

For example, from the thirtieth chapter of the Tatian Harmony to the end, the agreement with the capitulation of the *Codex Fuldensis* (cc. 110—182) is only thrice broken, first by the exemplar of the *Codex Fuldensis* having carried back c. 39 of the Harmony (the triumphal entry into Jerusalem) and placed it between c. 31 and 32, where it should have stood historically; secondly, by the same codex having carried the parable of the ten minae (c. 31) forward so as to place it almost immediately after the parable of the ten talents (c. 43); thirdly, by the carrying back, on the part of the same codex, of the account of the repentance of Judas, to its right place in the Gospel of Matthew.

Of the stages by which the Tatian Harmony passed over into the form in which Victor found it, we know but little: it is conceivable that there may lie between the Syriac Tatian and the Latin Victor a Greek adaptation of the Harmony, but the whole question is complicated by the fact that we do not possess the Tatian Harmony in its primitive form.

It will be seen that this agreement covers more than a third of the whole book. In the middle of the book the displacements are frequent, although it is often possible to assign a motive for them: but these displacements do not affect the argument.

VI. THE APOCRYPHAL ADDITIONS TO THE GOSPELS FOUND IN THE DIATESSARON.

Few subjects are of greater interest in connection with the Gospels than the study of the additional matter which has attached to them in their process of transmission or of the subtracted matter which may have been separated from them and discarded.

a slight re-statement: "There can be no doubt that Victor was mistaken about the authorship: for, though the work is constructed on the same general plan as Tatian's, it does not begin with John i. 1, but with Luke i. 1, and it does contain the genealogies. It belongs therefore, at least in its present form, neither to Tatian nor to Ammonius." There is a confusion here between the Harmony which Victor found and the one which he made.

Especially in connection with the sayings and doings of our Lord, the so-called apocryphal sentences, many of which were once current in copies of the New Testament, form a collection of such importance both for His own teaching and for the knowledge of the opinions of early schools of Christian thought, that they ought certainly to be attached to the authorized scriptures in the form of an appendix. Nor should we mourn much, if, in order to find a place for them, the prefaces and appendices which are found in the modern Revised Bible were to be curtailed or excised altogether. It is a matter of very small importance whether we say, "Our father which," or "Our father who;" but no one can say that the Section found in *Codex Bezae* concerning the man whom the Lord found working on the Sabbath day is destitute of ethical or even textual importance. Certainly not the latter; for, if we could find out the quarter from whence *Codex Bezae* derived the story, we should probably have in our hands the key to a multitude of other peculiarities found in that MS. and in a group of associated texts. Now, if we ask ourselves in what directions we ought to look for the existence of apocryphal matter connected with the New Testament, especially the Gospels (we use the word apocryphal in its right sense, without any contempt), the answer would be that the principal sources are:

(1) The Gospel according to the Hebrews, of which scraps are preserved to us in the margins of sundry copies of the Gospels, and in some of the early fathers:

(2) The old-Latin and old-Syriac versions of the Gospels:

(3) The Diatessaron of Tatian.

With respect to the first, we have at present little to say: what we know of it hardly concerns the Diatessaron; nor can we as yet trace any points of contact between the two in the matter of external eccentricities. If there be any such contact, it does not lie on the surface; and we may defer the search for it until we know more about the Diatessaron.

But with reference to the other two, the connection is intimate: the text of the Diatessaron is directly affiliated with the oldest Syriac texts of the Gospels; it is a brother to the old-Syriac of Cureton, and a first cousin to the old-Latin texts. If we can succeed in restoring it to its archaic form, it will probably solve for us more than half of the yet unsolved textual riddles in the Gospels. This means that its text is what Dr Hort calls Western;

even when revised it is Western and Syrian, with hardly a trace (if there be a trace) of the importation of Alexandrian readings, and no neutral readings at all or next to none.

This is a subject which will demand close and careful attention. At present, we only refer to it in order to indicate the following conclusion as one to which we shall probably be led, viz., that the Apocryphal additions which existed in the earliest Syriac texts of the Gospels will most likely find themselves a place in the text of the Diatessaron; and, conversely, apocryphal sentences which may be found in any pair of the triad, old-Latin + old-Syriac + Diatessaron, will probably be readings of the earliest Syriac text that ever existed: and, even where only one member of the group testifies to an apocryphal addition, we may occasionally support that reading so strongly from other quarters as to demonstrate its extreme antiquity.

Let us proceed to test this matter by a succession of examples of early Diatessaron readings. We begin with Matth., xviii. 7: "It must needs be that offences come, but woe unto him by whom they come." To this sentence are prefixed in the Homilies of Aphraates the words: "It must needs be that good come and blessed be he by whom it comes." Now, there is no reference in the homily of Ephrem to either part of the passage; but Aphraates introduces it with the words, "It is written," which shews that he is quoting from his Gospel, that is, from the Diatessaron or from a Syriac text closely related thereto.

When we turn to the Arabic version, we find no trace of the added words, so that, as far as the evidence of the Arabic goes, one would be inclined to say, it can hardly be a Diatessaron reading. The passage has no place in the Curetonian Syriac nor in any other copy or version.

But, suppose we turn to the Clementine Homilies, here we find (in *Hom.* xii. 29) the following sentence: "Then Peter answered, The prophet of the truth has said, Good things must needs come, and blessed, said he, is he by whom they come: in like manner, evil things must needs come, but woe to him through whom they come." Here, again, the language carries one to a sentence in one of the Gospels; and, while we cannot assert, positively, that this Gospel is the Diatessaron in its earliest form, we can at least say that it came from the Diatessaron or from some other early and uncanonical gospel. On examining the

Arabic Version more closely, we find the verse runs: "Woe unto the world because of offences. But woe unto that man by whom the offence cometh." The Arabic has therefore a curtailed text: it has left out at least the words, "It must needs be that offences come." Does it not look as if in erasing the added sentence, "Good things must needs come, etc.," and conforming the extract to the current gospels, the corrector had gone a little farther with his work of emendation than he intended to do? The suspicion is enough to turn the scale in the question as to whether the Diatessaron was used or not.

Suppose we take, as a second example for study, the famous apocryphal saying which is so frequently quoted by Origen and the early fathers, though not found, so far as I know, in any copy of the Gospels: I mean that powerful sentence, composed of only three words, in which our Lord advises His disciples to "be good money-changers" (Γίνεσθε δοκιμοὶ τραπεζίται). Harnack supposed that he had found a trace of this in a sentence of Ephrem's commentary on *Luke*, xvi. 1—12, which runs as follows: "Buy for ye, O Sons of Adam, by means of these transitory things which are not yours, that which is your own, which doth not pass away." But it must be admitted that, as the passages stand, the identification or connection of one with the other is uncertain, especially in view of the early interpretation of the trustworthy banker which makes him the person who tests philosophy and tells the base metal from the true. We can therefore understand why Zahn should have said, of Harnack's reference, that it was to him unintelligible. But let us carry the matter a little further; we have shewn, in the previous section, that there is some probability that the writer of the Clementine Homilies was acquainted with the Diatessaron, or at least that he drew from a source used by the Diatessaron. Whatever may be the probability for that acquaintance bears also upon the reference of the sentence about the trustworthy bankers to the same source; for this sentence is also an apocryphon of the Clementine Homilies. Thus we find in *Clem. Hom.*, III. 61: "Thou oughtest to have given my money to the exchangers and then I at my coming should have got my own. Cast out the unprofitable servant into the outer darkness! And with good reason, 'for,' says He, 'it is thine, O man, to prove my words, as silver and money are proved among the exchangers.'" This evidently assumes the underlying sentence, "Be good money-

changers"; only the sentence is somewhat worked up after the fashion of the Homilies. It occurs, moreover, as a direct quotation in three other places of the Homilies, viz. II. 51: "with good reason said our Master, Be good money-changers"—III. 50: "And inasmuch as He said, Be prudent money-changers, it is because there are genuine and spurious words"—XVIII. 20: "For thus He spake, Become experienced bankers. Now the need of bankers arises from the circumstance that the spurious is mixed up with the genuine." So far, then, it favours Harnack's view, that the sentence was found in the Diatessaron; only it seems to locate it in the neighborhood of *Matth.*, xxv. 30.

But this is not all: we have shewn that the Gospel which was in the possession of the writer of the Doctrine of Addai was the Diatessaron of Tatian: now in the Doctrine of Addai we find the apostle addressing the people of Edessa as follows: "According as my Lord commanded me, lo! I preach and publish the Gospel, and lo! *His money do I cast upon the table before you.*" The last sentence presupposes the doctrine of the good bankers: which must therefore have been in the Gospel of the person who wrote the Doctrine of Addai.

A further curious confirmation may be found in the following consideration. We have shewn, some pages back, that Victor of Capua, in the sixth century, possessed a copy of Tatian's Harmony which he made the foundation for the Harmony of the Gospels that is contained in the famous *Codex Fuldensis*. Now, it is worthy of note that, although Victor has deserted the text of Tatian, preserving only his method and using the readings of the Vulgate in his gospel, he has in his preface shewn acquaintance with the saying about the "trustworthy bankers": for he concludes with a prayer that the Holy Spirit will impart to him the grace of discretion, whereby he may be able, like the best bankers, and according to the word of the apostle, to prove all things and follow those things which are good¹. We may be strengthened

¹ *Ut nos in ueritate scripturarum suarum erudire dignetur . et discretionis gratiam tribuat . quatenus ut optimi trapezitae . omnia probemus secundum apostolum et quae sunt bona sectemur.* The connection of ideas is the same as in Origen who, in his commentary on *Matthew*, says: "It is the part of a great man to hear and fulfil that which is said, Prove all things, hold fast that which is good. Still, for the sake of those who cannot like money-changers distinguish whether words are to be held as true or false, and cannot guard themselves carefully, so as to hold that which is true and yet abstain from all evil appearance, no one ought to use for the

by this language of Victor to believe that the saying in question was a part of the Tatian Harmony which he possessed, although Victor gives us no clue as to its place in the Harmony.

Upon the whole then we see reason to believe that there stood originally in the Diatessaron the sentence in question, though we are not quite sure in what part of the Gospel it stood. Thus far then we may agree with Harnack. Two of the sentences in the Clementine Homilies are on this shewing Diatessaron quotations. It has been the fashion to refer these passages in the Clementines to an Ebionite gospel: this may be so, but in that case Tatian must have used the Ebionite gospel along with the other four, which I am extremely reluctant to believe. There are many indications that the author of the Clementines used a harmony and not a collection of gospels.

The fact is that there are more traces of such use of harmonized Gospels than people are well aware of: not only do the Clementine Homilies suggest the use of a harmony, but a similar feature shews itself in the Apostolical Constitutions. It was in consequence of his perception of this fact that Lagarde¹ was so earnest in his efforts to bring out an edition of the Arabic Harmony, such as we now possess; and was indeed only deterred from his purpose (as he has so often been hindered) by difficulties that attach themselves to Oriental printing². It becomes an interesting question, then, to examine whether any of the passages in the Clementines, or in the Apostolical Constitutions, which seem to be based on a harmonised narrative, exhibit any agreement with the Diatessaron. This enquiry we defer for the present.

A further question presents itself, as to whether the other apocryphal sayings in the Clementines are capable of being traced to a similar origin. These quotations are as follows: *Hom.* III. 55: "He said, The evil one is the tempter"—*Hom.* XIX. 2: "He said, Give no pretext to the devil." These sentences we have not yet succeeded in tracing to their source: nor have we been successful in identifying the Harmony which seems to have been used by

confirmation of doctrines any books which are not received in the Canonized Scriptures."

¹ *Ap. Const.*, p. vii.: *si evangeliorum in margine nomina adscribo, non ideo auctorem ex evangeliiis sua hausisse credo, legit enim illa ni fallor harmoniam e quatuor evangeliiis concinnatam.*

² Lagarde at first wished to publish the Arabic text, at Ciasca's request, but relinquished the plan after giving a specimen in the *Götting. gelehrte Anzeigen*.

the author of the Clementines in other passages than those quoted.

The "trusty banker" is also found in the second book of the Apostolical Constitutions: the passage is as follows: "To the priests alone has injunction to judge been made, for it has been said unto them, 'Judge righteous judgment'; and again, 'Be tried money-changers'.....; and in another place, 'Why of your own selves judge ye not that which is right?' Become therefore like cunning money-tellers, for as these condemn the false coins, and appropriate the tested money, in the same way the bishop must hold to the unblameable, and heal or cast away the blameable."

The question then arises as to whether the author of this part of the Constitutions used the Tatian Harmony, for he certainly quotes the famous saying as part of the Scripture. The hypothesis is an inviting one, in view of the fact that a number of the quotations in the Constitutions seem to be harmonized; upon examination, however, we are unable to detect a sufficient agreement between these quotations and the text of the Arabic Harmony to warrant us in saying that the text of Tatian has influenced that of the Constitutions.

Our third instance of apocryphal addition to the Gospel narrative is taken from *Diat.* c. XXXI. = Mark x. 51: "Jesus said unto him: What wilt thou that I should do unto thee? The blind man said unto Him: My Lord and Teacher, that thou shouldst open my eyes, and *that I may see thee.*" A more exquisite gloss, if it be a gloss, it would be difficult to imagine. One can understand how the revision of the Diatessaron came to spare it. Suppose we enquire, then, as far as possible into the origin of the reading: there is every reason *à priori* to regard it as coming from the earliest form of the Diatessaron, or even from a preceding Syriac version; but confirmation seems wanting. Nothing of the kind is found in the extract which Zahn gives from Ephrem on the passage: nor is there anything from Aphraates: further, the Curetonian Syriac is wanting in this part of *Mark*. When, however, we turn to the parallel passage in *Matthew* (xx. 32), we find the Curetonian Syriac reads: "They say unto him, Our Lord, that our eyes may be opened and we may see thee." Furthermore in the still more closely parallel passage in *Luke* (xviii. 41), the Curetonian Syriac has a like reading: "What wishest thou I should do to thee? He said to him, My

Lord, that my eyes may be opened, and I may see thee." So that there must have been something of the kind current in the earliest Syriac, and in all probability the quotation in the Diatessaron should be regarded as an adaptation of *Luke*, rather than of *Mark*, especially as the rest of the narrative in the Diatessaron (except the next verse) is taken entirely from *Luke*. Moreover, when we turn to Ephrem (p. 181), we find something which suggests the same reading. "The Lord, seeing that his inward eyes were illuminated, while the outer eyes saw nought, made these as open as the other, in order that *He might be visible and manifest to him*." Here again we are brought to the same apocryphal appendix. So that a careful study of the collateral testimony confirms our belief that the apocryphal passage of the Arabic Version may be carried back to the earliest form of the Harmony.

Our next illustration of an apocryphal saying in the Diatessaron is taken from *Luke*, XXIII. 48. The verse in the Arabic follows on *Matth.*, XXVII. 54, thus: *Matth.*, XXVII. 54, "Truly this was the Son of God. *Luke*, XXIII. 48, And all the multitudes, who had come together to the sight, seeing what had happened, returned beating their breasts." So far, there is nothing that differs from our current texts; but, when we turn to the Doctrine of Addai, we find the following passage, in which the connection of ideas needs to be carefully studied: "Unless those who crucified Him had known that He was the Son of God, they would not have had to proclaim the desolation of their city nor would they have brought down Woe! upon themselves." Now, we may detect in this passage a reference to the passage which the Diatessaron quotes from *Matthew*; but there is nothing in what follows in the Arabic Harmony which suggests an allusion to the desolation of the city, or an imprecation upon or lamentation over themselves. Suppose we turn to the Curetonian Syriac: here we have: *Luke*, XXIII. 47..."Truly this man was just. And all those which were assembled there, and saw that which was done, were smiting upon their breast and saying, Woe to us, what is this! Woe to us for our sins."

Here we have the connection which was wanting in the Arabic Harmony; and the same reading is found in the celebrated old-Latin Codex of St Germain, which reads: "Woe unto us, the things which are done to day for our sins: for the desolation of

Jerusalem hath drawn nigh." Taking this with the Curetonian passage, we can restore the whole of the sequence which is found in the Doctrine of Addai. But that Addai took it from the Diatessaron and not from the old-Syriac is evident, not only from what we know of its text from its own allusions to the Diatessaron, but also from the fact that it does not say, "This was a just man," as all MSS. do in *Luke*, but, "This was truly the Son of God," as it runs in *Matthew*. We can therefore restore the missing sentences to the Diatessaron, and, if any doubt remained in our minds, it would be dispelled by turning to Ephrem's Commentary on the Harmony (pp. 245, 246): "*Woe unto us, woe unto us, this was the Son of God....When the sun of righteousness had appeared, purifying the lepers and opening the eyes of the blind, by that light the blind men did not recognise that the king of the city of Jerusalem had come. But when the natural sun had failed them, then by the darkness it became transparent to them that the destruction of their city had come. The judgments of the ruin of Jerusalem, saith he, are come.*"

The present case has the special interest that, although the Arabic version furnished no clue to an omission, the old-Syriac and old-Latin with Ephrem and the Doctrine of Addai enable us to restore the matter of the missing sentence with perfect confidence.

Over and above the Apocryphal additions properly so called there are a number of glosses due to Tatian himself and added by way of explanation; sometimes they seem to contain matter of tradition which he had gathered outside of written sources. We will examine a few of these passages in order to get an idea of the method employed by Tatian and of the liberty which he allowed himself in his combinations.

VII. COMBINATIONS AND AMPLIFICATIONS IN THE TEXT OF THE DIATESSARON.

One of the first things that will strike the reader of the Arabic Harmony as translated by Ciasca is the occurrence of numerous apocryphal sayings and sentences, and the suggestion which the text gives of the excision of other similar sayings and sentences, now no longer apparent. These additions range from the smallest glosses, frequently only single words (which may be mere expressions of a translator's freedom), up to whole sentences of foreign and interpolated matter. For example, take the following in-

stances, which have, as far as I know, not the slightest attestation elsewhere :

In Mc. vii. 26 it is added that the Syrophenician woman was a Gentile from the city of Emesa : “*et illa mulier erat gentilis ex Hemesen Syriae.*” It is possible that the addition is due merely to a local tradition current in the neighborhood where the Diatessaron was written : and patristic students will recall a somewhat similar statement in the Clementine Homilies (II. 19) where Peter speaks of the same woman as follows :

“There is amongst us one Justa, a Syro-Phoenician, by race a Canaanite, whose daughter was oppressed with a grievous disease. And she came to our Lord crying out, and entreating that He would heal her daughter. But He, being asked also by us, said ‘It is not lawful to heal the Gentiles, who are like unto dogs on account of their using various meats and practices, while the table in the kingdom has been given to the sons of Israel.....For she being a Gentile and remaining in the same course of life, He would not have healed her had she remained a Gentile, on account of its not being lawful to heal her as a Gentile.’”

What one notices in this Clementine extract is that the writer has apparently extra-evangelic information about the Canaanite, viz. her name, and that the point which he wants to get over is the fact of her being a Gentile : now certainly this might have been taken from the current gospels, but it seems to me very likely that he may have got it from the Tatian Harmony in which it is given especial prominence ; in which case it would be reasonable to infer that there stood originally in the Harmony also the name Justa. For otherwise both the Clementines and the Harmony are working up a common tradition ; but even then the tradition gave her name, as well as her place of abode ; and Tatian in expanding his narrative for Syriac readers would have been as likely to add the one as the other.

Another curious addition will be found in Matt. xxvi. 47 : where after describing the approach of the crowd with lanterns and torches, and swords and staves, sent by the chief priests, &c., it is added :

“And with them there was a man of the Romans.”

What is the reason of this addition ? Was it to explain the presence of the soldiery ? Or is it an anticipation of the young man in the linen garment ? Most likely it is the former : as the term

"Romans" is the natural Syriac equivalent for soldiery. Certainly there seems no other textual evidence forthcoming to support it. So in Matt. xvi. 12 we are told that they understood "that they should beware of the doctrine of the Pharisees and Sadducees *which he called bread*." Such instances of unsupported glosses, which are certainly Tatianisms, give us greater confidence in affirming a similar statement for certain similar passages in Ephrem, as for example, where at the end of Mc. vii. 10 "He that curseth father or mother, let him die the death" is added the sentence "he that blasphemeth God, let him be crucified"; or in John i. 47 where Nathanael is spoken of by Ephrem as "*a true Scribe, an Israelite, in whom is no guile*": although these glosses do not any longer stand in the Arabic text. The same thing may be true of Aphraates who gives Matt. v. 5 as "Blessed are the meek for they shall inherit the land *of life*."

With these unsupported glosses, then, the Tatian Harmony must have been thickly sprinkled; we are not bound, however, to infer that they stood in the Gospels which he used. Such additions as John xxi. 6, "They could not draw the net for the multitude of fishes *which had come into it*"; or John xxi. 12, "Knowing that it was the Lord. *But he did not appear to them in His own form*," are just the sort of additions which one might expect from a free hand, occupied in transcribing a continuous gospel for Church use. The last gloss is perhaps due to Mark xvi. 12 (*ἐν ἐτέρᾳ μορφῇ*), and so is of critical importance. These glosses then are for the most part what we may call unattested in the text of the N.T.; and singly attested amongst the authorities for the Harmony. When we pass to those which have a greater degree of attestation in the Harmony, we are the less able to speak confidently with regard to their non-attestation in the N.T.: because we shall find that there is some unknown nexus between the text of the Western authorities for the N.T. and the text of the Harmony. The surer we are of a Diatessaron reading, the more likely we are to find it in Western attestations, whatever may be the reason for the coincidence.

Some of these better attested readings are very interesting: for instance in Luke vii. 14 Ephrem gives "*Young man, young man, I say unto thee, arise*," while in Mark v. 41 Aphraates expressly says "He called her twice and said to her, *Maid, maid*",

¹ Hence the corruption in Codex Bezae: λέγει αὐτῇ ραββί, θάβιτα κοῦμι.

arise." The combined evidence betrays a tendency to reduplication in our Lord's mode of address, similar to what we find in the rest of the Gospel (e.g. *Simon, Simon*; and *Martha, Martha*), although the Arabic does not preserve the trait. The reading turns up also in Codex Bezae and one or two early Latins.

In Matt. xiv. 32 the N.T. gives us, without any sensible variation, the words: "When they were come into the ship, the wind ceased." The Arabic has "And when Jesus had drawn nigh, he ascended into the ship, himself and Simon, and immediately the wind ceased": compare with this Ephrem's text, "When the Lord had come, and had ascended the ship along with Peter": and it is easy to see that the Harmonist had to expand the narrative for his hearers, in order that they might more clearly see that, when Jesus came on board, Peter was not left outside.

In John iv. 7 for the common reading "Give me to drink," the Harmonist, as shewn by Ephrem and the Arabic, must needs complete the sentence and write "Give me water to drink"; the addition marks a tendency to expansion of the statements of Scripture and is not due to the fact that Tatian was an Encratite! Will Dr Hort maintain in the view of this and similar passages that "the evidence which has recently come to light as to his (Marcion's) disciple Tatian's Diatessaron has shewn that Tatian habitually abridged the language of the passages which he combined"? It seems to me that for a Harmony the tendency is all the other way. A few more cases of the kind may be given with advantage.

Luke iv. 20. "And he folded the book and gave it back to the minister *and went away* and sat down."

Mark i. 33. "And all the city was gathered together at the door *of Jesus*."

Luke vi. 8. "He saith to the man with the withered hand, "Stand forth into the midst *of the synagogue*."

All of these are Tatianisms, taken almost at random from the pages. Do they look like habitual abbreviation? Or take Matt. x. 29, "Are not two sparrows sold for a farthing *in the tavern*?" which shews that the birds were sold for eating, or the next verse, where the emphatic word (*ὑμῶν*) in the sentence "The hairs of your head are all numbered," is brought out by the rendering "But as far as relates to you, even the hairs of your head, &c." Or in Luke x. 39 where the feeling of motion which the Greek

puts into the words "Mary sat at Jesus' feet" (*πρὸς τοὺς πόδας*) is expressed in the Arabic by "Mary coming sat at the feet of the Lord," and in Ephrem by "Mary came and sat." The evidences of this tendency are constant: and they prohibit us from regarding Tatian as an abbreviator.

Neither does the Arabic Harmony give us any encouragement in the belief that Tatian made doctrinal omissions to suit his own views: if he wrote the Harmony after he became a Gnostic he would perhaps have followed Marcion in omitting the words of Christ to the thief: "This day thou shalt be with me in Paradise."

But these words are in the Arabic and in the Armenian. It may be urged that perhaps he omitted them and that they were subsequently restored: Ephrem would be sure to do this, since in using the Harmony he rails assiduously at Marcionism and Encratism en route, comparing the Encratites to Judas who received from the Lord bread soaked in water, and with such like criticisms securing his readers from the danger of the heresy that might lurk in the Harmony: but even if we admit this we may still say the case against Tatian on the ground of tampering with the Scriptures for doctrinal ends is an unproved case. He can only be condemned on hypothesis: suppose, for instance, that the passage which occurs twice in the Clementine Homilies¹ "ye do err, not knowing the true things of the Scriptures; for this reason ye are also ignorant of the power of God" were asserted to be from the Tatian Harmony; we find no support for it in our Arabic Version, nor any trace of it in Ephrem who discusses the adjacent verses. The passage certainly has a Marcionite look about it: and there are some points of contact between the Clementine Homilies and the Tatian text, but the proof of wilful change is inadequate; and if it existed it extends only to expansions and not to omissions. The Arabic Harmony certainly encourages no such belief. But perhaps the best idea of Tatian's method would be to take a passage which seems to have come down to us without much change; say the account of the Transfiguration: Ciasca gives it as follows:

Mc. viii. 39. Et dixit illis: amen
dico vobis: Sunt enim quidam
hic stantes, qui non gustabunt

¹ Hom. ii. 51. Hom. iii. 50.

- mortem, donec videant regnum
 Dei veniens in virtute ;
- Mt. xvi. 28^c. et Filium hominis
 venientem in regno suo.
- xvii. 1. Et post dies sex assumpsit
 Jesus Simonem Cepham, et
 Jacobum et Joannem
 fratrem eius et duxit
 illos in montem excelsum
 seorsum.
- Luc. ix. 29^a. Et dum ipsi orarent,
 transfiguratus est Jesus
 et factus est in speciem
 alterius personae.
- Matt. xvii. 2^b. et resplenduit facies
 eius sicut sol,
- Luc. ix. 29^b. et vestitus eius factus
 est candidus nimis velut
 nix et sicut splendor fulguris
- Mc. ix. 2^b. ita, ut nihil super terram
 possit sic candidum fieri.
3. et apparuerunt illi Moyses
 et Elias loquentes cum Jesu.
- Luc. ix. 31^b. Et putabant tempus
 adventus eius futuri, qui
 complendus erat in Jerusalem,
 iam advenisse.
32. Simon autem, et qui cum illo
 erant, gravati erant sopore somni.
 Et expergefacti sunt vix, et viderunt
 gloriam eius, et duos viros,
 qui stabant apud illum,
- 33^a. Et cum hi coepissent discedere
 ab illo, ait Simon ad Jesum
 Praeceptor, bonum est, nos hic
 esse ;
- Matt. xvii. 4^b. si vis, faciamus hic
 tria tabernacula ;
- Luc. ix. 33^b. tibi unum, et Moysi
 unum, et Eliae unum :
 nesciens quid diceret,

- Mc. ix. 6^b. propter timorem, qui
eos apprehenderat.
- Matt. xvii. 5^a. Adhuc eo hoc dicente,
et mox nubes lucida
obumbravit eos:
- Luc. ix. 34^b. et cum vidissent Moysen
et Eliam intrantes in nubem,
iterum timuerunt.
- Mt. xvii. 5^b. Et audita est vox de nube,
dicens: Hic est Filius meus
dilectus, quem elegi: ipsum
audite.
- Luc. ix. 36^a. Et cum audiretur haec
vox, inventus est Jesus solus.
- Mt. xvii. 6. Et audientes vocem discipuli
prae timore, qui apprehenderant
eos, ceciderunt in faciem suam.
7. Et accessit Jesus, et tetigit eos,
et dixit: Surgite, nolite timere.
8. Et levantes autem oculos suos,
viderunt Jesum sicut erat.

The above passage affords an instructive study in the combination of the several documents. Under Luke ix. 29^a we see the words 'transfiguratus est Jesus' introduced from Matt., while the rest of the clause shews, (1) the change of singular to plural (dum ipsi orarent), and a free translation of ἐγένετο τὸ εἶδος τοῦ προσώπου αὐτοῦ ἕτερον.

In Luke ix. 29^b the text has taken up 'nimis' from Mark and perhaps 'velut nix' from the same source, while the ἐξαστράπτων of Luke has been combined with ὡς τὸ φῶς of Matt., by the aid of Matt. xxviii. 3 into 'et sicut splendor fulguris.'

In Mc. ix. 2^b the allusion to the 'fuller' is dropped: but it is to be noticed that the Harmony here has the support of D, X, the Peshito, and the old Latins *a*, *b*, *i*. The omission is clearly Western.

It reads οὕτως with many early authorities.

In Mc. ix. 3 we have by error 'illi' where we should have the plural; the reading is unsupported.

Luke ix. 31^b furnishes us with remarkable variations, which can however be traced to their origin; a reference to the Ethiopic

text shews us the evidently conflate text "gloriam eius quam oportet fieri in Hierosolyma et exitum eius quoque," from which it is obvious that *ἐξοδον* has been read as *δόξαν*¹. Further the 'putabant' comes from the preceding words *ἐν δόξῃ ἔλεγον* and the sentence was completed by 'tempus adventus eius futuri' to explain 'gloriam' and by adding 'iam advenisse' at the close.

In Luke ix. 34 in accordance with the best Western interpretation the persons who enter into the cloud are Moses and Elias; the Curetonian Syriac agreeing therewith by saying "and when they saw these, that they enter into the cloud."

In Matt. xvii. 5^b we find substituted from Luke *ὁ ἐκκληλεγμένος* for *ἐν ᾧ εὐδόκησα*: and a reference to Ephrem shews that there once stood at the end of the verse the words 'et vivetis.' These have disappeared in the Arabic.

Finally in Matt. xvii. 8 we have the addition of 'sicut erat' which is perhaps from 1 John iii. 2; and must be due to Tatian. This would make an early authority for, and evidence of the diffusion of that epistle.

At all events we see from the foregoing that hardly a word is dropped by Tatian which could have been introduced; and that he does not hesitate to gloss his text from other Scriptures besides the Gospels, as well as from his own handiwork, where anything was needed to complete the sense or clarify the meaning, appears from many passages. Thus the Harmony is a commentary on Scripture as well as Scripture: and no unworthy commentary.

We see again the assimilation of the Tatian texts and the Western texts, one to the other. It may be regarded as certain that the restored Tatian text is one of the earliest forms of what are known as Western authorities.

VIII. TRACES OF THE DIATESSARON IN THE MSS. OF THE GREEK AND LATIN GOSPELS.

The chief point of uncertainty, with regard to the origin and circulation of the Tatian Harmony, lies in the direction intimated by the heading which we attach to this chapter. Was the Harmony written in Greek and translated into Syriac? and, if so, had it any Greek currency? Or was it purely and only a Syriac book? Harnack maintains strenuously that the Diatessaron is

¹ An exactly similar error may be found in the Greek of the Acts of Perpetua, c. xix.

properly a Greek document, and even goes so far as to discount the researches of Zahn, by which so much was done to shew the influence of the Diatessaron on the churches of Mesopotamia. Without engaging ourselves, at the present time, in this problem further than to say that the two positions are not mutually exclusive, we propose to approach the more simple question, as to whether any traces of the Diatessaron can be found in the actual Greek texts which have come down to us, leaving the question as to how they came there to be decided after we have proved that they exist. Whether in the proof we have armed Harnack with valid arguments wherewith to strengthen his somewhat uncertain attack, or whether we have disarmed Zahn of any of the forcible conclusions which follow from his analysis of the early Syrian fathers, will be a question for speculation after we have assured ourselves of certain preliminary facts. Now, the facts are these: It is indisputable that, in certain notable MSS. of the Greek Gospels, there are found sporadic traces of readings which cannot be easily paralleled from any other source than the Tatian Harmony. Of this we shall give some striking examples.

a. Codex W^a.

In the library of Trinity College, Cambridge, there are preserved, between two plates of glass, a number of fragments of an uncial MS. of the Gospel of Mark, which were discovered in the binding of a copy of Gregory Nazianzen by Mr White of Trinity College Library who pointed them out to the librarian of the University (Henry Bradshaw *ὁ μακαρίτης*). The MS. may be referred by its handwriting to the ninth century, and has many points of interest, as for example, that the Eusebian canons are given in harmony at the foot of the page, while the Eusebian sections are set on the margin. But the most remarkable feature of all is a unique reading in the text itself, according to which we have as follows: Mark vii. 33: "He (Jesus) spit *upon his fingers* and put them into the ears of the deaf man and he touched the tongue of the man with the impediment in his speech" (*ἐπτυσεν εἰς τοὺς δακτύλους αὐτοῦ καὶ ἔβαλεν εἰς τὰ ὦτα τοῦ κωφοῦ καὶ ἥψατο τῆς γλώσσης τοῦ μογγιλάλου*).

Compare with this the following from the Arabic Harmony: Mark vii. 33: "and spitting *upon his fingers* he put them into his ears and touched his tongue, etc." No other evidence is forth-

coming for this eccentric reading, the Curetonian Syriac being deficient; but, even if the latter text were extant and shewed the reading in question, it would scarcely weaken our belief that the passage came from the Diatessaron: the only alternative being, that it stood not only in the Diatessaron, but in an earlier Syriac before the Diatessaron¹. And, when we remember that the Greek MS. is furnished with musical notes and was very likely itself written for lectionary use, there is nothing strange in its absorbing a sentence which, originally, was commonly read in the churches.

β. *Codex Algerinae Peckover.*

This MS., numbered 561 Evv. in the New Testament Catalogue, was described in the *Amer. Journal of Biblical Literature and Exegesis* (Dec. 1886) as containing a remarkable text which awakened suspicions of a genealogical connection with the famous Ferrar-group. By the kindness of my friend, the owner of this MS. (Miss Algerina Peckover of Wisbech, England), I was able to collate it pretty thoroughly, twice; and in the course of the study I lighted upon a singular reading which, from the negative evidence of every critical apparatus, I decided to be unique in the New Testament, although I had some suspicion that it had distant relation with the Curetonian Syriac. The passage was as follows: *Matth.*, xvii. 26: "Of whom do the kings of the earth take custom or tribute? Of their own children or of the aliens? Peter saith to him: Of the aliens. *Jesus said to him, Then are the children free? Simon said, Yes. Jesus saith to him, Then do thou also give, as being an alien to them.* But that we do not offend them go to the sea and cast a hook and take the first fish that cometh up, and when thou hast opened his mouth thou shalt find there a stater lying, etc." The important parts of the Greek text being as follows: ἄράγε ἐλευθεροὶ εἰσιν οἱ υἱοί; ἔφη Σίμων· ναί· λέγει ὁ Ἰησοῦς· δὸς οὖν καὶ σύ, ὡς ἀλλότριος αὐτῶν.

Now let us compare with this the following passage from the Arabic Harmony: *Matth.*, xvii. 25: "Simon saith to him, From aliens. Jesus said to him: Then the children are free. *Simon saith to him, Yea. Jesus said to him: Then do thou also give to them as being an alien:* but lest they be brought into straits, go

¹ Cf. what is said on p. 47, touching the relations of the Harmony to the Ferrar group.

to the sea and cast a hook, and having opened the mouth of the fish that first comes up, thou shalt find a stater."

It is evident that both of these writers, of the Arabic Harmony and of the Greek Gospel, have taken something from a common source.

That which is eccentric in the modern Harmony must certainly be taken from the primitive Harmony, the Arabic from the early Syriac; that which is eccentric in the Greek looks as if it had a Syriac origin; the abrupt change from Peter to Simon is sufficient to suggest this. Furthermore, there are, in the Old-Latin texts, suspicious indications which look as if, at one time, something had stood there corresponding to our Codex and the Old-Syriac, at the close of the story, "Thou shalt find *there* a stater lying," where these texts read either "there" or "in him," and are supported in the reading by the Curetonian Syriac.

It is within the bounds of possibility, then, that the Codex to which we have referred has been affected by the text of a Diatessaron, possibly a Syriac Diatessaron.

The question at once arises as to whether any further coincidences with the Harmony can be found in Ev. 561: the answer is not easily given; for the Tatian text is, as we have shewn already, a Western text, and is therefore hardly capable of identification, where it has influenced other copies, because of its similarity to other Gospels of the Old-Latin or Old-Syriac type. We might, for example, at first sight be tempted to say that when, at the close of *Matth.* VIII. 13, the MS. adds the words from *Luke*, "and the centurion returned to his house in that very hour and found him in sound health," that these are the very words which follow in Tatian. But the suggested inference would prove too much, for there are many MSS. which have the same assimilation of the texts of the two gospels. Certainly it is nothing peculiar to the MS. in question, and the difficulty is one that will recur: how are we to distinguish between a reading that is purely Tatian's and one that is Western, as we shall proceed to shew that Tatian's text generally was?

γ. *Relation of the Tatian Harmony to the Ferrar Group.*

The lost MS. which Professor Ferrar attempted to restore from the combined texts of the group designated by the numbers

13—69—124—346 is well known to be a very early text and as eccentric as it is early. It is perfectly alive with assimilations of the Gospels to one another, and misplacements of the matter contained are common. And the singular conflate readings which it contains shew that at least two types of text are present in it, of which one has been used to correct the other. It becomes interesting therefore to see whether any of these singularities are due to the Tatian Harmony. The following cases of agreement should be noticed:

Matt. ix. 35. The Arabic Harmony adds: *et multi sequebantur eum*: with the support of the Ferrar group and the Uncials **Σ** L (**Σ** om. *multi*). The reading is certainly not original; but it is a very natural one to arise in a Harmony.

Matt. xiv. 24. The Arabic Harmony reads: “*Navicula autem pluribus stadiis a terra distabat*”: with the support of the Ferrar-group and of almost all the versions but not the Latin, nor any uncial except B. The question is whether this reading is the original or derived from John vi. 19. If the latter it probably came by way of Tatian.

Mark vii. 33. It may be maintained that the curious reading which we noted in W^d and the Harmony was in the ancestry of the Ferrar-group, which now stands: ἐπέβαλε τοὺς δακτύλους αὐτοῦ πτύσας εἰς τὰ ὦτα αὐτοῦ καὶ ἤψατο τῆς γλώσσης αὐτοῦ, where we have only to interchange ἔβαλε and πτύσας to get the Harmony reading.

Luke ix. 29, where the Harmony reads “*Et dum ipsi orarent*” the Ferrar-group gives καὶ ἐν τῷ προσεύχασθαι αὐτούς, not indeed in Luke where it has the usual text, but in Mark ix. 3 where it expands the text as follows: καὶ ἐν τῷ προσεύχασθαι αὐτοὺς μετεμορφώθη ὁ Ἰησοῦς ἔμπροσθεν αὐτῶν.

A comparison with the Harmony shews that the Ferrar text has been emended from the Harmony, for it has not only the curious change to the plural, but also the necessary insertion of ὁ Ἰησοῦς which does not belong to the text.

In the same account (the Transfiguration) the Ferrar-group gives us for νεφέλη φωτεινὴ, νεφέλη φωτὸς (Matt. xvii. 5). Now this reading is obviously a Syriasm; and as such it appears no doubt in the Tatian Harmony, although Ciasca gives us ‘nubes lucida’: for it is also the reading of the Curetonian Syriac, and according to Tischendorf, of some passage of Ephrem. The

only Greek authorities for it besides the Ferrar contingent (13—124—346) are 209, 238 and a few others. It is reasonable to refer the reading to Syriac influence, and this, taken with what has preceded, means Tatian influence.

In Mark ix. 28 the Harmony gives: "Et cum introisset Jesus in domum, accesserunt discipuli ejus etc.," where the word *accesserunt* has been borrowed from Matthew xvii. 19 to complete the account, the Matthew text being *Τότε προσελθόντες οἱ μαθηταί*. Now the Ferrar text in Mark has made precisely the same completion as the Harmony and like the Harmony has changed the participle of Matthew into a verb, so as to read *προσῆλθον αὐτῷ*: nor is this all: the Harmony for *ἐπηρώτων αὐτὸν* has *interrogantes eum, dixerunt illi*; and accordingly the Ferrar text gives *ἐπηρώτων αὐτὸν, λέγοντες*. The addition is probably due to the text in Matthew (*εἶπον*). No other evidence exists for it beyond one or two cursives. It seems reasonable to suppose this is not a mere accidental coincidence in assimilation.

In Luke xvi. 21 the text of Aphraates certainly added the words "and no man gave unto him" to the passage where Lazarus desired to "fill his belly" (so Aphraates, by assimilation to the story of the Prodigal) "with crumbs from the rich man's table."

Now the Ferrar text has not altered *χορτασθῆναι* into agreement with Tatian, but it has added the words *καὶ οὐδεὶς ἐδίδου αὐτῷ*. The authorities for this change are very slight (a stray cursive or Latin MS. :) in the absence of any early Western attestation we may perhaps say this reading too is a Tatianism¹.

In Luke xxiv. 40 the Harmony has "ostendit eis manus et pedes et latus": a reading which is apparently compounded of Luke xxiv. 40 and John xx. 20. Now if we turn to John xx. 20 in the Ferrar text, we shall find the verse run

ἔδειξεν αὐτοῖς τὰς χεῖρας καὶ τοὺς πόδας καὶ τὴν πλευρὰν αὐτοῦ.

There is some ground for believing this reading also (which has no other Greek support and only that of one Latin Vulgate MS.) to be a Tatian reading.

From the above passages we see a strong probability that the

¹ On the other hand note that there is a converse assimilation in Luke xv. 16 where *χορτασθῆναι* has been substituted for *γεμίσαι τὴν κοιλίαν αὐτοῦ*. Dr Hort holds that *χορτασθῆναι* is the primitive reading. But as no one can deny that the words "no man gave unto him" in Aphraates are from Luke xv., it seems reasonable to affirm that the previous words came from the same source.

Ferrar text has been influenced by Tatian, either by a Greek rendering of Tatian or by Syriac corrections.

Now if this could be proved, then, without arguing in a circle, we could carry back some curious passages in the Ferrar text to Tatian, where the Arabic Harmony shews no direct signs of them.

For example; at the close of Luke xxiv. 43 the Ferrar text adds (i.e. 13—346) *καὶ λαβὼν τὰ ἐπίλοιπα ἔδωκεν αὐτοῖς*. In this it has the support of Cod. 561 which we have detected in one palpable Tatianism and the Old Syriac which Tatianizes eternally; so that we may with a bold face claim the reading for Tatian. Not indeed for Tatian's MSS. but for himself: for the only other support consists of late Latin and two late Greek uncials KII. It must therefore follow further that late Western texts at all events shew some traces of Tatianism.

A similar singular reading in Ferrar is John xx. 16 where there is added the words

καὶ προσέδραμεν ἄψασθαι αὐτοῦ.

This reading is supported by \aleph^a and scanty late Latin and Syriac testimony. The Ferrar text here is attested by 13—346. I conjecture this reading to be added by Tatian as a preface to "Noli me tangere."

In Luke vii. 45 the Harmony (c. 15) reads

"Osculum tu mihi non dedisti."

But that something more stood here is evident from Ephrem who gives "Osculum unum salutationis tu mihi non dedisti."

Now it is significant that Cod. A with Cod. 346 (Ferrar) read *ἀγάπης* after *φίλημά μοι*. The Curetonian Syriac however has no addition to the text. Nevertheless from the conjunction of Ephrem and the other two, we may very well imagine the Tatian text had here a word answering to the Greek *ἀγάπης*. No doubt other instances of the kind may be forthcoming: and the suspicion of Tatianizing in the Ferrar group becomes a key to explain the origin of numerous singular early readings. The difficulty consists in the determination of a Western reading from a Tatian reading proper, not by any means an easy thing. But it may be very fairly maintained that where there are found in a copy of the Gospels any assimilations or additions of a harmonistic nature and when there are also found the same conjunctions in an actual harmony, it is at least an open question whether the

harmony in question may not claim to be the author and origin of some at least of the variants.

For example when in transcribing Mark xvi. 14 the Harmonist gives

Et oblitī sunt discipulī eius panem sumere

where the words *discipulī eius* are added from the parallel narrative in Matt. xvi. 5 (but, as so often happens in the Arabic Tatian, without any marginal explanation of their origin); and when we find the same addition made in the Ferrar group, in D and one or two others; it is not inconceivable that the Harmony is answerable for them.

Again, when in the Arabic we find

Matt xvi. 8^a. *Sciens autem Jesus, dixit eis: Quid cogitatis intra vos, modicæ fidei.*

Mark viii. 17^b. *et solliciti estis quia, etc.*

it is not surprising that the Ferrar group should read in Mark *τί διαλογίζεσθε ἐν ἑαυτοῖς ὀλιγόπιστοι* although the last three words are not considered to form a part of the true text of Mark.

Where the Arabic gives Mark ix. 28 as follows: *Et cum introisset Jesus in domum accesserunt discipuli eius et inter se et illum interrogantes eum, etc.* with the words *προσῆλθον αὐτῷ* adapted from Matt. xvii. 19, the Ferrar text reads *καὶ εἰσελθόντος αὐτοῦ εἰς οἶκον προσῆλθον αὐτῷ οἱ μαθηταὶ αὐτοῦ κτέ.*

In Luke xix. 22 the Arabic has

Dixit ei dominus eius: De ore tuo iudico serve nequam, negligens, fiducia destitute.

It is needless to say that this did not all come from Luke: *fiducia destitute* may perhaps be traced to Matt. xxv. 30 (*ἀχρεῖον*) and is certainly represented by the Curetonian 'qui non fidelis'; *negligens* is from Matt. xxv. 26 (*ὀκνηρὸς*); and it is only reasonable to assume that the explanation *dominus eius* is from the same source: but this addition is made by the Ferrar group as well as the Curetonian text. Does not this throw Ferrar's origins into the neighbourhood of Tatian?

In Mark xiv. 13 we find:

Mark xiv. 13^b. *Ite intrate civitatem.*

Luke xxii. 10^b. *et introeuntibus vobis, etc.*

In view of this conjunction, is it a thing to be astonished at

that the Ferrar text should carry into Mark the words

εἰσελθόντων ὑμῶν εἰς τὴν πόλιν?

The same thing happens in the following case :

Mark xiv. 65^b. *Milites autem, percutientes genas eius, dicebant :*

Matt. xxvi. 68. *Prophetiza nobis, Messia, quis est, qui te percussit :*

and the Ferrar text gives us in Mark *προφήτευσον + νῦν Χρίστε τίς ἐστιν ὁ παῖσας σε.*

These instances will suffice to shew that the conjunctions of passages in the Tatian Harmony are a sufficient cause of many assimilations in the Ferrar text ; it will probably be urged in reply that the same thing would be true of any text which had made rational assimilations of connected passages : this is perfectly true ; and the only thing to be remembered is that we have also a singular concurrence in queer readings which put the two texts in question side by side and invited the explanation which we have suggested.

The transposition of the famous passage in Luke (xxii. 43, 44) to Matt. by the Ferrar group has little light thrown on it by the Harmony. While it is certain that Tatian had this passage, the Harmony in its present state presents it in the proper connection in Luke.

Those persons who hold the Calabrian or South-Italian origin of the Ferrar group will find no difficulty in the supposition that a Tatian Harmony strayed into the hands of Victor of Capua in the sixth century.

IX. ON THE RELATION OF THE TATIAN TEXT TO THE WESTERN NON-INTERPOLATIONS.

One of the most important questions in connection with the textual criticism of the N. T. is that of the so-called Western non-interpolations. These passages are practically nine in number, and the peculiarity of the textual evidence is this, that an important and early group of witnesses do not recognize their existence, and upon the faith of this group of witnesses (chiefly Old-Latin texts) Dr Hort excludes them from the representation which he gives of the original text of the Gospels, although for convenience he retains them provisionally within double brackets. Of these nine passages, one is in the Gospel of Matthew, and the remaining eight at the close of the Gospel of Luke.

Now it is of the highest importance for us to be able to

determine how the original Tatian text stands with regard to these interpolations; for we have shewn reason for believing that the Tatian text is in the main a Western text, according to Dr Hort's classification: and not only a Western text in general, but where it can be come at, a Western text of the highest antiquity.

Let us then examine these nine passages with care, and see what light they throw upon the origin of the Tatian text.

The first of them adds in Matt. xxvii. 49 the words

ἄλλος δὲ λαβὼν λόγχην.....αἶμα

and on the faith of an anonymous Scholion in Ev. 72 it has been maintained that this glaring transposition (as it certainly seems to be) from the Gospel of John (xix. 34) was found in the consecutive Gospel of Tatian.

Now certainly it is just such a mistake as a Harmonist might be guilty of, and there is no reason why such a mistake, once made, should not be widely propagated. It is, however, almost impossible to believe that the Scholion can be correct, since the Arabic version gives the passage in John without any sign of displacement, and the Armenian text, as we get it from Ephrem, certainly places the piercing of our Lord's side after His death. And although we have not the old Syriac text to help us, we may reasonably hesitate to believe that the primitive Syriac harmony shewed any trace of such a dislocation. The only way to defend such a position would be to shew that Ephrem has corrected the error: now this might be maintained in the following way: first, by shewing that a comparison of Ephrem's text with the Arabic displays several displacements of the order, evidently on the part of Ephrem; secondly, that the quotation in Ephrem is accompanied by the remark "This was done that they might know that he was alive after death," which shews that the question as to whether a living or a dead body had been pierced was in the mind of Ephrem. But the evidence is insufficient to establish the case. The proof that Tatian's New Testament contained the passage in connection with Matthew is not yet forthcoming.

Let us now go on to examine the eight passages in Luke which are obviously from one origin, either by omission or insertion, as the classified attestation will shew: the simplest way will be to present the variants in tabular form:

- a. Luke xxiv. 3. [τοῦ κυρίου Ἰησοῦ]
 D a b e ff rhe om. Syr. vt. Tat. arab. τοῦ Ἰησοῦ. rell. habent.
- β. Luke xxiv. 6. [οὐκ ἔστιν ὥδε ἀλλὰ ἡγέρθη]
 D a b e ff rhe om. Syr. vt. Tat. arab. rell. habent.
- γ. Luke xxiv. 12. [Ὁ δὲ Πέτρος.....γέγονεν]
 D a b e rhe om. ff. Syr. vt. rell. habent.
- δ. Luke xxiv. 36. [Καὶ λέγει αὐτοῖς Εἰρήνη ὑμῖν]
 D a b e ff rhe om. Syr. vt. rell. habent.
- ε. Luke xxiv. 40. [καὶ τοῦτο εἰπὼν ἔδειξεν αὐτοῖς
 τὰς χεῖρας καὶ τοὺς πόδας]
 D a b c ff rhe syr. vt. om. rell. habent.
- ς. Luke xxiv. 51. [καὶ ἀνεφέρετο εἰς τὸν οὐρανὸν]
 D a b c ff rhe om. rell. habent. Syr. vt. deest.
- ζ. Luke xxiv. 52. [προσκυνήσαντες αὐτὸν]
 D a b e ff rhe om. Tat. arab. rell. habent: Syr. vt. deest.

The last passage is Luke xxii. 19, 20 which we will turn to presently.

Now in examining the foregoing table, the following points must be noticed, viz. that under (γ) no evidence is forthcoming with regard to the Harmony, because the passage in Luke could not be quoted, even if it were known to the Harmonist, being only an abbreviation of the fuller account in John which the Harmony gives. Under (δ) we observe that in the Arabic the passage runs

John xx. 19. ...venit Jesus et stetit in medio eorum *et dixit eis: Pax sit vobiscum:*

Luc. xxiv. 36. ego sum, nolite timere

37. et ipsi conturbati et conterriti &c.

Now it is obviously impossible to tell whether the words italicised belong to John or to interpolated Luke, since they stand precisely in the right place for either supposition. We therefore leave it an open question for the present.

Precisely the same thing happens under (ε) for although the Arabic Harmony has the verse it has it in such a form that although it comes in due sequence in the narrative from Luke (xxiv. 36—49) it betrays the use of John's Gospel, at least in part, for it reads "Et cum hoc dixisset, ostendit eis manus et pedes et latus," which is John xx. 20 with a slight modification.

The same difficulty arises under ς , where the Harmony gives Luke xxiv. 51. Et dum benediceret illis, divisus est ab eis, *et ascendit in caelum*

Mc. xvi. 19. et sedit a dextris Dei.

Now the words underlined might equally well be the first part of the verse quoted from Mark, which verse, as far as concerns us, is not a later addition to that Gospel since the Harmonist was certainly acquainted with the last twelve verses of that Gospel.

Now the survey of these seven passages shews us, that where we have the evidence of the Arab. Harmony and of the Old Syriac, they stand together, and thus give us with sufficient clearness the evidence of the original Tatian text. The same thing comes out when we examine the remaining passage (Luke xxii. 19, 20) as we shall see presently. Now the presumption is that the same agreement between the two authorities holds in the remaining cases; i.e. that we may regard the Arabic Harmony as concurring with the Syriac in (δ) where we have the clear evidence of the Syriac version: and perhaps in (ζ) where we have the fairly clear evidence of the Arabic, although the text of the last may have been subject to change. Leaving this last passage out, the evidence would shew that the Archaic Tatian text was generally under the influence of the so-called Western non-interpolations; and since these interpolations are obviously the work of a single hand, to prove the influence in one case for such an early text as Tatian used would be to practically prove it for Tatian all round. We see it, however, not in a single case, but in a number of cases, and some of these as (α) (β) are perfectly decisive. The case (ϵ) where the Old Syriac is with the non-interpolating Latins is the only clear contrary case. And this is probably due to the fact that the Syriac text, like the Ferrar archetype, carried the passage in question over into John instead of taking it back into Luke: but the Curetonian text of this part of John is missing. Now here we have two important facts which demand an explanation; first, how does it come about that such a notably Western text as that of Tatian furnishes no clear support to the non-interpolating early Western texts; and secondly how does it happen that the Harmony which apparently knows the interpolations as anterior to itself furnishes the very material to explain the origin of the interpolations? By the last question we mean this, that Dr Hort holds the interpolation (δ) in the gospel of Luke to be due to

John xx. 19 which evidently precedes the passage from Luke in the Harmony, and similar explanations may be made for (ε) and (ς).

The solution of this perplexity seems to lie in the following direction; THERE MUST HAVE BEEN A PREVIOUSLY EXISTING HARMONY, PROBABLY A HARMONY OF THE PASSION-GOSPELS, which Tatian used, AND WHICH HAS ALSO BEEN USED AS A REVISING FACTOR IN THE ANCESTRY OF ALL TEXTS OF THE GOSPELS EXCEPT THE NON-INTERPOLATING WESTERNS. Such a supposition explains the reading (α): it shews why Tatian gives the reading (β) although he has already quoted the passage in Matt. (xxviii. 6) from which the interpolation was made: it explains why the Harmony does not give us (γ) Luke xxiv. 12, for though this stood in the earlier Harmony it was not suited (in Tatian's idea) to be used along with the passage in John of which it is an obvious epitome. The other cases are perfectly lucid in view of the hypothesis made; only we have to notice that the Old Syriac has not been influenced by the Harmony in Luke xxiv. 10, but perhaps it may have been so in John xx. 20.

Now let us turn to the remaining passage Luke xxii. 19, 20. Here the words

τὸ ὑπὲρ ὑμῶν διδόμενον...ἐκχυννόμενον

are omitted by Dabeffirhe.

The Old Syriac reads *τὸ ὑπὲρ ὑμῶν τοῦτο ποιεῖτε εἰς τὴν ἐμὴν ἀνάμνησιν* and makes a transposition in the remaining part of the narrative so as to make the Eucharistic order more natural. Now the Tatian Harmony agrees closely with the Syriac in this: that it quotes nothing from the interpolated section except the words which correspond to the following sentence

καὶ οὕτως ποιεῖτε εἰς τὴν ἐμὴν ἀνάμνησιν.

This is sufficient agreement to shew that the Tatian Harmony was not constructed without a knowledge of the interpolation: but since the interpolation is only partially used in Tatian, and is itself of a harmonistic character, we may reasonably refer it, as before, to a previously existing Harmony, which has evidently taken it from 1 Cor. xi. 24, as we may also see from the language of Aphraates whose text stood *καὶ οὕτως ποιεῖτε εἰς τὴν ἐμὴν ἀνάμνησιν, ὁσάκις ἐὰν συνέρχησθε* which has an additional adaptation from 1 Cor., which must have stood in Tatian if not in

Pre-Tatian, and it is also seen from the omission of *διδόμενον* by the Curetonian Syriac, so furnishing a closer agreement with the text of 1 Cor. xi. 24. The close agreement between the Old Syriac and Tatian may seem to support the theory of Baethgen that the former is actually based upon the latter. And certainly they are very closely related; but in one or two places the Old Syriac seems to shew an acquaintance with the interpolated passages beyond what we can trace at present in Tatian: and the simplicity of the theory offered to account for the interdependence of Tatian and the Old Syriac may be thought to have given it an undue weight.

Perhaps we may sum up the matter as follows: the early N.T. texts divide on certain notable readings into non-Western interpolators and Western non-interpolators: the text of Tatian is naturally Western, but it has followed in part a previously existing Harmony of the Passion from which the interpolating MSS. have drawn their peculiar accretions: and hence it appears amongst the interpolating MSS. as if supporting their evidence when it is in reality explaining it away. Whether this previously existing Harmony, which we may call 'Pre-Tatian,' was in Greek or not, is an interesting question: since it gives us *ἀνεφέρετο* in Luke for the *ἀνελήμφθη* of Mark, from which the interpolator borrowed, we may incline to the belief that this Pre-Tatian was not a Greek work: most likely, then, as in the case of Tatian proper, it was a Syriac work. Now it is precisely in Syriac that we find the Harmonies of the Passion-gospels so frequent.

We may now return to the famous scholion in Ev. 72 which attributes to Tatian the interpolation in Matt. xxvii. 49. It will be very difficult to explain the reading as anything else than a careless harmonistic error; and since we have shewn that no trace of it can be found in the evidence for the Tatian Harmony, while the evidence for its being a Western non-interpolation is very strong, we may refer it to the Passion-Harmony which Tatian used: and this perhaps explains the reference of the Scholiast, while it carries the error back into the earliest times.

The assumed Passion-Harmony will explain also why Justin so positively refers the words "Do this in remembrance of Me" to the gospels. Even in Aphraates the words carry the marks of their origin in 1 Cor., for he gives "Do this in remembrance of me, as often as ye meet together"; which is the best evidence we

have for the primitive Tatian text. Now Justin's gospels shew the harmonization of the passage in 1 Cor. with the Gospels *before the time* of production of Tatian's Harmony.

But the supposition suggests even more than this: if the existence of the Tatian Harmony is evidence for the antiquity of the Gospel of John, the existence of an early stage of textual growth, marked by a Harmony of the Passion-Gospels or at least by the existence of the passages called "Western non-interpolations" as anterior to the time of Tatian, presupposes the existence of the matters harmonized at a very early time indeed. Thus the existence of Tatian's Harmony is momentous evidence for

- (i) the antiquity of the four Gospels,
- (ii) of the Acts of the Apostles,
- (iii) of the first Epistle to the Corinthians,

and perhaps of some other portions of the New Testament of which we find traces in Tatian or pre-Tatian. Let us explain this a little more at length. We can easily see that the four Gospels being necessarily anterior in date to the time of Tatian, must be *long anterior* to the period mentioned. And we see it in three ways: first, because it is unreasonable to quibble over a passage which seems to be quoted by Justin from St John's Gospel, as to whether it be really the Johannine text, or the Johannine theology in the air and in embryo, when we find that the disciple of Justin harmonizes four Gospels of which St John's is one; secondly, when we find that prior to the Tatian Harmony there was an earlier Harmony containing portions of the four Gospels, and this Harmony was used by Justin; so that the question of the antiquity of the four Gospels is removed by at least one more generation than was required in order to make Tatian's Harmony possible, and thirdly, whether the pre-Tatian Harmony existed or not, the various readings which were caused by the interpolations existed before Tatian, and these readings being of a harmonistic nature, the case for the priority of the Gospels stands as it did before; for a reading in Luke is not going to be expanded from John or Mark except on the hypothesis that these Gospels exist in a form from which borrowing is practicable: so far-reaching is the evidence to be derived from the elementary lesson which Dr Burgon conveyed in one of his writings, in his own forcible manner: "Have you not yet found out, sir, that all various readings are early?" To which we append the further question, "Have

you not found out yet that all harmonistic readings prove that the passages harmonized are earlier than the early readings?"

And as we have said, the evidence which we draw attention to is not confined to the four Gospels. Pre-Tatian used the first Epistle to the Corinthians. Tatian, if we may judge from Ephrem, inserted the account of the death of Judas from the Acts of the Apostles. Pre-Tatian used the last twelve verses of St Mark; and just as we argued from Tatian's use of the four Gospels to their use by Justin, so we are able to infer from Tatian's use of the last twelve verses that Justin used them. It does not depend merely upon the inference that Justin used pre-Tatian; it is well known that Justin used a passage which has been held by many to be a part of the last twelve verses; accordingly Dr Hort places at the head of the Patristic Greek evidence for these verses the name of Justin, bracketed and queried, thus—(? Justin). And he argues as follows:

"The Greek Patristic evidence for vv. 9—20 perhaps begins with Justin (*Ap.* i. 45) who interprets 'Παβδὸν δυνάμεως ἐξαποστελεῖ σοι ἐξ Ἱερουσαλήμ (Ps. cx. 3) as predictive τοῦ λόγου τοῦ ἰσχυροῦ ὃν ἀπὸ Ἱερουσαλήμ οἱ ἀπόστολοι αὐτοῦ ἐξελθόντες πανταχοῦ ἐκήρυξαν. On the one hand it may be said that the combination of the same four words recurs in v. 20: on the other that they were natural and obvious words to use, and to combine, and that v. 20 does not contain the point specially urged by Justin ἀπὸ Ἱερουσαλήμ...ἐξελθόντες (cf. *Ap.* i. 39, 49) which is furnished by *Lc.* xxiv. 47 ff., *Acts* i. 4, 8. On both sides the evidence is slight, and decision seems impossible. It should be added, however, that the affinity between Justin's text and that of Irenaeus (see below) leaves the supposition of a reference to v. 20 free from antecedent improbability as regards textual history." Happily for us, the Arabic Harmony is still able to throw some light on the question; the changes through which it has passed have not been sufficient to remove all its ancient characteristics; when we turn to the text of Ciasca we find

Luc. xxiv. 25. Et ipsi, adorantes eum, regressi sunt *in Jerusalem* cum gaudio magno:

53. et omni tempore erant in templo laudantes et benedicentes Deum. Amen.

Marc. xvi. 20. Et, *inde* egressi, praedicaverunt ubique &c.

Here then we have the evidence for the missing ἀπὸ Ἱερου-

σαλήμ; it is even possible that the very words stood in the Tatian-sources; at all events they are sufficiently implied in the word *inde* which still stands in the Arabic. Dr Hort may therefore remove the query from the name of Justin in the tabulated evidence for the last twelve verses.

On the other hand, this is not inconsistent with his theory that the verse to which Justin alludes is made up out of passages in Luke and Acts, for we have shewn reason to believe that Justin drew the verses from a Harmony earlier than Tatian. Our hypothesis satisfies all Dr Hort's criticisms, and in establishing the antiquity of the last twelve verses of St Mark as a literary product (for of course we have not proved authorship), we have *a fortiori* established the antiquity of the Gospels out of which the last twelve verses were compounded (e.g. the words in Luke xxiv. 13 sqq. which may have been epitomized in Mark xvi. 12 etc.).

If this reasoning is valid, it will be seen to involve a very high antiquity for many of the New-Testament books. And indeed the argument might have been strengthened; for it may well be true as we have suggested, that the primitive Harmony, the nucleus of Tatian's, was itself a Syriac work: and the supposition of a translation is one more step that requires time in the observed processes of change¹.

Nor is the argument for antiquity confined to the Gospels; for there are other touches in Tatian which suggest the use of the Apostolic Epistles: we have not dwelt on them because it encumbers an argument to burden it with doubtful matter. Still it is conceivable that when in his account of the Transfiguration Tatian says that the disciples "saw Jesus as He was," that his thought might have been coloured by 1 John iii. "We shall see Him as He is."

I have also detected an alteration of text which seems to have been made under the influence of the Epistle to the Hebrews.

In Luke xxii. 43 the words *γενόμενος ἐν ἀγωνίᾳ* are replaced

¹ It may not be amiss at this point to draw attention to a curiously confident passage in Dr S. Davidson's book on the *Canon of the Bible*, p. 99. "Whatever may be said about Justin's acquaintance with this Gospel (i.e. the Gospel of John) its existence before 140 A.D. is incapable either of decisive or probable shewing. The Johannine authorship has receded before the tide of modern criticism and though this tide is arbitrary at times it is here irresistible."

by "Et cum timeret": and it may perhaps be that the words came from a passage in Heb. v. 7 where our Lord is said to have poured out "strong crying and tears," and to have been "heard for His pious fear" (εὐλαβείας which the Latins give as 'pro metu,' 'a metu' amongst other renderings). Now we know sufficient of Tatian's method to enable us to say that he never omitted anything in the shape of a historical detail which might serve to give completeness to his story; hence it seems likely that the 'cum timeret' is from Hebrews: and if he carried that over he certainly took the 'tears' also from Hebrews at the same time; and this brings us to the reading καὶ ἔκλαυσε which Epiphanius accuses the orthodox of subtracting from the text of the Gospel.

The main body of the passage Luke xxii. 43, 44 may very well have been found not only in Tatian but in Pre-Tatian, for the allusion of Justin to the θρόμβοι αἵματος in his Dialogue with Trypho (c. 103) is distinctly from the ἀπομνημονεύματα τῶν ἀποστόλων or Memoirs of the Apostles, which is the same term as he uses in previous quotations from Pre-Tatian, though it must not be limited to any such composition.

The importance of the study of Tatian for the knowledge of the New Testament in the middle of the second century is certainly very great.

X. UNSOLVED PROBLEMS.

It will be seen by what precedes that there is a great deal of work to be done in connection with the Arabic Harmony, and it is beset with difficulties. To begin with, in the determination of the missing Syriac of Tatian, we must be careful to remove all those readings of the Arabic version which are either due to a translator's liberty of speech or to erroneous reading of his copy. When, for example, we find in Luke iv. 19 the words "praedicare malis remissionem," although at first sight it might appear to be an ancient Greek reading of ἀμαρτωλοῖς for αἰχμαλώτοις, a closer examination will shew that the translator read ܠܚܝܒܐ as ܠܚܝܒܐ. And in the same way it is conceivable that the gloss in Mark vii. 26, "ex Hemesen Syria," may have arisen out of a corrupt transcription of Συρφοίνισσα. At all events we must be prepared for such cases.

Again when Ciasca gives us in Matt. xxiii. 24 "ornantes

camelum," there must be some mistake either in the Arabic or in the translation; and in fact if we correct Ciasca's **ونردرون** to **ونردرون** which is only a transposition of a couple of adjacent letters we get the ordinary reading, which no doubt stands for the primitive Syriac **ܕܠܚܡ** as in the Curetonian text. So when the Arabic gives *Betharrahmah* for the name of the pool of Bethesda, this only means that there has been a translation made of the Syriac **ܕܠܚܡ ܕܡܝܬܐ**; and the Arabic name is the same as that found in the Curetonian.

When we have succeeded in replacing the Arabic text, as far as possible, by the primitive Syriac out of which it was developed, our next step will be to determine the nature of the Greek text from which the Syriac translation was made.

We shall readily detect that it was a Greek text in which disintegrating textual influences had been busy. Some of the changes made are mere trifles as when in Matt. iii. 10 the Harmony followed by the Old Syriac gives "Ecce securis ad radicem, &c.," which involves the reading of ἡδη as ἰδε. But others are much more serious: let us examine for instance:

Mark ix. 15: "et cum vidissent homines Jesum, recesserunt, et prae gaudio properantes, salutarunt eum." Here the ordinary text is ἐξεθαμβήθησαν, καὶ προστρέχοντες ἡσπάζονται αὐτόν.

The words 'prae gaudio' evidently arise from reading προσχέροντες (= προσχαίροντες) in the Greek: and the old Latins shew the influence of the same text: D reading προσχέροντες and c ff² *i k gaudentes* which *b* disguises as *cadentes*. This error is very important from a critical point of view, inasmuch as it could not have passed into the Western text from a Syriac harmony: it must have been earlier than the Harmony. Again in Luke xxi. 35 "ipsa enim tanquam ictus percutiet omnes &c.," here it is tolerably clear that παγίς (written of course in uncials) has been confounded with πληγή. Further than this it is also likely that ἐπεισελεύσεται has been read as ἐπισαλεύσεται.

Such readings shew that the text upon which Tatian worked had serious errors of transcription in it. Let us take one more instance; in Luke xxii. 11 we find along with other changes from the usual text, the words "et fames et pestilentiae et commotiones; terrores ac pavores erunt." The last words are a misreading for φόβητρά τε which has been taken as φόβοι τέρατά τε, a

reading actually preserved in Cod. A, a MS. whose text has affinities with Tatian. The Syriac of the error is preserved in the Peshitto, ܠܐܝܬܐ ܠܠܝܬܐ, and it must have stood so in Tatian; but we cannot say that the error originated in the Syriac; it is clearly an error made in a Greek text.

But what Greek text was this? an ordinary Western copy? and did Tatian write his work originally in Greek and then translate it into Syriac; or was his earliest edition a bilingual in the style of Codex Bezae with line for line translation? And whether in Greek or in Syriac, did it exercise any reflex influence upon the current texts, and if so, what are the characteristics of this influence in extant copies? All of these questions are at present involved in great obscurity. But they will, we may hope, be resolved before long; the solution would be much expedited if we could recover an early copy of the Syriac Tatian; and such a prospect is by no means unreasonable. But even if the recovery of such a text should be delayed indefinitely, we ought not to despair of the results which may be attained by an honest criticism working on the materials that are already accessible.

APPENDIX ON CODEX W^d.

THE prominence into which this MS. is thrown by the coincidences between its text and the Tatian harmony renders it advisable that its text should be printed in full: we have accordingly given a transcription and photographic reproduction of the fragments. The size of the various pieces can be estimated by means of the attached scale of inches which has been photographed along with the MS. The accents and reading signs we have not transcribed.

From the appearance of the MS. and an examination of the contents of the separate pages it would seem that we had here a part of the outside double leaf of a quaternion and a complete inside leaf, the two intermediate leaves being lost.

Mark vii. 3.

ΚΑΙ ΠΑΝΤΕΣ ΟΙ ΙΟΥΔΑΙΟΙ [ΙΕΛ] Ν
 ΜΗ ΠΥΓΜΗΝΙΨΟΝΤΑ [ΙΤΑΣ
 ΧΕΙΡΑΣ ΟΥΚ ΕΘΙΟΥΣΙΝ ΚΡΑ]
 ΤΟΥΝΤΕΣ ΤΗΝ ΠΑΡΑΔΟΣ [ΙΝ]
 ΤΩΝ ΠΡΕΣΒΥΤΕΡΩΝ· [ΚΑΙ]

Ⲡ	ⲗ	Ⲛ	Ⲡ
ζθ	λε		ρνγ

Mark vii. 6, 7.

> ΠΟ]ΡΡΩΔ ΠΕΧΕΙΑ ΠΕΜΟΥ· ΜΑ
 > ΤΗ]Ν ΔΕ ΕΣΕΒΟΝΤΑΙ ΜΕΔΙΔΑΣ
 > ΚΟ]ΝΤΕΣ ΔΙΔΑΣΚΑΛΙΑΣ ΑΝΤΑΛ
 Μ]ΑΤΑ ΔΑΝΩΝ· ΒΑΠΤΙΣΜΟΥΣ
 ΖΕ]ΣΤΩΝ ΚΑΙ ΠΟΤΗΡΙΩΝ

Mark vii. 30—36.

ΜΟΓΓΙΛΑΛΟΥ

[—]
^κ
[—]
 οδ [Κ]ΔΙΠΑΛΙΝΕΞΕΛΘΩΝΑΠ[ΟΤ]Ω
 ΟΡΙΩΝΤΥΡΟΥΚΑΙCΙΔΩΝΟC·
 ΗΛΘΕΝΕΙCΤΗΝΘΑΛΑCΣΑΝ
 ΤΗCΓΑΛΙΛΑΙΑCΑΝΑΜΕ[CΟ]Ν
 ΤΩΝΟΡΙΩΝΤΗCΔΕ[ΚΑΠΟΛΕ]
 ΩC + ΚΑΙΦΕΡΟΥCΙΝΑΥΤΩ
 ΚΩΦΟΝΚΑΙΜΟΓΓΙΛΑΛΟΝ
 ΚΑΙΠΑΡΕΚΑΛΟΥΝΑΥΤΟΝ
 ΙΝΑΕΠΙΘΗ[ΤΑC]ΧΕΙΡΑC + Κ
 ΕΠΙΛΑΒΟΜΕΝΟCΑΥΤΟΝΑΠΟ
 ΤΟΥΟΧΛΟΥΚΑΤΙΔΙΑΝΕΠΤΥ
 CΕΝΕΙCΤΟΥCΔΑΚΤΥΛΟΥCΑΥ
 ΤΟΥΚΑΙΕΒΑΛΕΝΕΙCΤΑΩΤΑ
 ΤΟΥΚΩΦΟΥ· ΚΑΙΗΨΑΤΟ
 ΤΗCΓΛΩCΣΑCΤΟΥΜΟΓΓΙΛΑ
 ΛΟΥ + ΚΑΙΑΝΑΒΛΕΨΑCΕΙCΤΟΝ
 ΟΥΝΟΝΑΝΕCΤΕΝΑΞΕΝΚΑΙ
 ΛΕΓΕΙΔΑΥΤΩ + ΕΦΦΑΘΑΟΕC
 ΤΙΝΔΙΑΝΥΧΘΗΤΙ + ΚΑΙΔΙ [←] ΕΥΘΕΩC
 ΗΝΟΙΧΘΗCΑΝΑΥΤΟΥΑΙΑΚΟ
 ΑΙΚΑΙΤΟΥΜΟΓΓΙΛΑΛΟΥΕΛΥ
 [ΘΗΟΔΕCΜΟCΤΗCΓΛΩCΣΗCΚΑΙ]
 ΕΛΑΛΗΟΡΘΩC + ΚΑΙΔΙΕCΤΕΙΛΑΤΟ

^ρ ^δ ^ϊ ^π
 οε ςγ μθ ρζ
 ος

Mark vii. 36—viii. 4.

ΔΥΤΟΙCΙΝΑΜΗΔΕΝΙΛΕΓΩCΙΝ
ὅε ΟCΟΝ[ΔΕ]ΔΥΤΟΙCΔΙΕCΤΕΛΛΕΤΟ
Ι ΔΥΤΟΙΜΑΛΛΟΝΠΕΡΙCCΟΤΕ
 ΡΩCΕΚΗΡΥCCΟΝΚΑΙΠΑΝ
ὅς ΤΕC[ΕΞ]ΕΠΛΗCCΟΝΤΟΛΕΓΟΝΤΕC
 [ΚΑΛ]ΩCΠΑΝΤΑΠΟΙΕΙ'ΤΟΥC
 ΚΩΦΟΥCΠΟΙΕΙΑΚΟΥΕΙΝ'
 ΚΑΙΤΟΥCΑΛΑΛΟΥCΛΑΛΕΙΝ'
ΚΑ ΕΝΕΚΕΙΝΑΙCΤΑΙCΗΜΕΡΑΙC
 ΠΑΜΠΟΛΛΟΥΟΧΛΟΥ[CΥΝΔΧ]
 ΘΕΝΤΟCΚΑΙΜΗΧΟΝΤΩ
 ΤΙΦΑΓΩCΙΝΠΡΟCΚΑΛΕCΑ
 ΜΕΝΟCΤΟΥCΜΑΘΗΤΑC'ΛΕ
 ΓΕΙΑΥΤΟΙCΠΛΑΓΧΝΙΖΟ
 ΜΕΕΠΙΤΟΝΟΧΛΟΝΟΤΙΗΔΗ
 ΗΜΕΡΑΙΤΡΕΙCΠΡΟCΜΕΝΟΥ
 CΙΜΟΙΚΑΙΟΥΚΕΧΩCΙΝΤΙ
 ΦΑΓΩCΙΝΚΑΙ[ΕΑ]ΝΑΠΟΛΥ
 CΩΔΥΤΟΥCΝΗCΤΕΙCΕΙCΟΙ
 Κ[ΟΝ]ΔΥΤΩ[ΝΕΚΛΥΘΗ]CΟΝ
 ΤΑΙΕΝΤΗΘΩ'ΤΙΝΕCΓΑΡ
 ΔΥΤΩΝΜΑΚΡΟΘΕΝΗΚΟΥ
 CΙΝΚΑΙΑΠΕΚΡΙΘΗCΑΝΔΥ
 ΤΩΟΙΜΑΘΗΤΑΙΔΥΤΟΥ'

Mark viii. 4—10.

ποθεν τοῦ τοῦ σδ ὕνησῃ
 ταί τις χορτασαι ὡδε αρτῶ
 ἐπερ ημίας· καί ἐπ ηρωτα
 αὐτοῦ σποσοῦσε χε τε αρτοῦς
 οἱ δέ εἰπον ἐπτα καὶ [πα]
 ρη γεῖ λεν τω οὐ λω ἀναπε
 σεῖνε πῆ της γης· καὶ ἰλα
 βον τοῦ σε πτα αρτοῦς· εὐ
 χαρίσ της ας· ἐκλασεν καὶ
 ἐδίδου τοῖς μαθηταῖς αὐ
 τοῦ ἵνα παρὰ θω σῖν καὶ
 παρ ἐθνη καν τω οὐ λω·
 Καί εἰ χον ἰχθὺ δια οἷ γα· κ
 αὐτα εὐλογησας· εἶπεν πα
 ραθῆναι· ἐφαγον δέ καὶ
 ἐχορτασθῆσαν· καὶ ἡραν
 περισσεύματα κλασματῶ
 ἐπτα σπύριδας· ἡσαν δέ
 οἱ φαγοντες ὡς τετρακίς
 χίλιοι· καὶ ἀπελυσεν αὐ
 τοῦς· καὶ ἐμβασεν
 ὁ ὡς εἰς τὸ πλοῖον μετὰ τῶ
 μαθητῶν αὐτοῦ· ἡλ[θεν
 εἰς τὰ μερὴ δαλμανοῦ θα·

—
oz

ⲙⲣ	ⲗ	Ⲛ	ⲙⲣ
oz	κγ	νγ	ρζα
			ρζβ

Mark viii. 11—16.

και εζηθον οι φαρισαιοι
 και ηρξαντο συζητειν
 αυτω· ζητουντες παρα-
 τους σημειονα ποτου ουνου
 πειραζοντες αυτον· και
 αναστεναξαν· οτι οτι οτι
 του λεγει· τι η γενεα
οη αυτης σημειον επιζητει·
 αμην λεγω υμιν· ειδο
 θησεται ιη γενεα αυτη
 σημειον· και αφεις αυ-
κβ τους εμβασπαλιν εις το
 πλοιοναπηλθεν εις το
 περαν· και επελαθοντο
 οι μαθηται αυτου λαβειν
 αρτους· και ειμνησαρ-
 τον ου κειχον μεθε αυτω
οθ εν τω πλοιω· και ιδι-
 ε στελλετο αυτοις λεγων· ο
 ρα τε και βλεπετε απο της
 ζυμης των φαρισαιων
 και της ζυμης ρωδου·
 [Κ]αι διελογизοντο προς [αλλη]-
 λους λεγοντες· οτι αρτους

ⲙ	ⲗ	ⲙ	ⲙ
οη			
οθ	ρμθ	ρζγ	
π		ρζδ	
		ρζε	

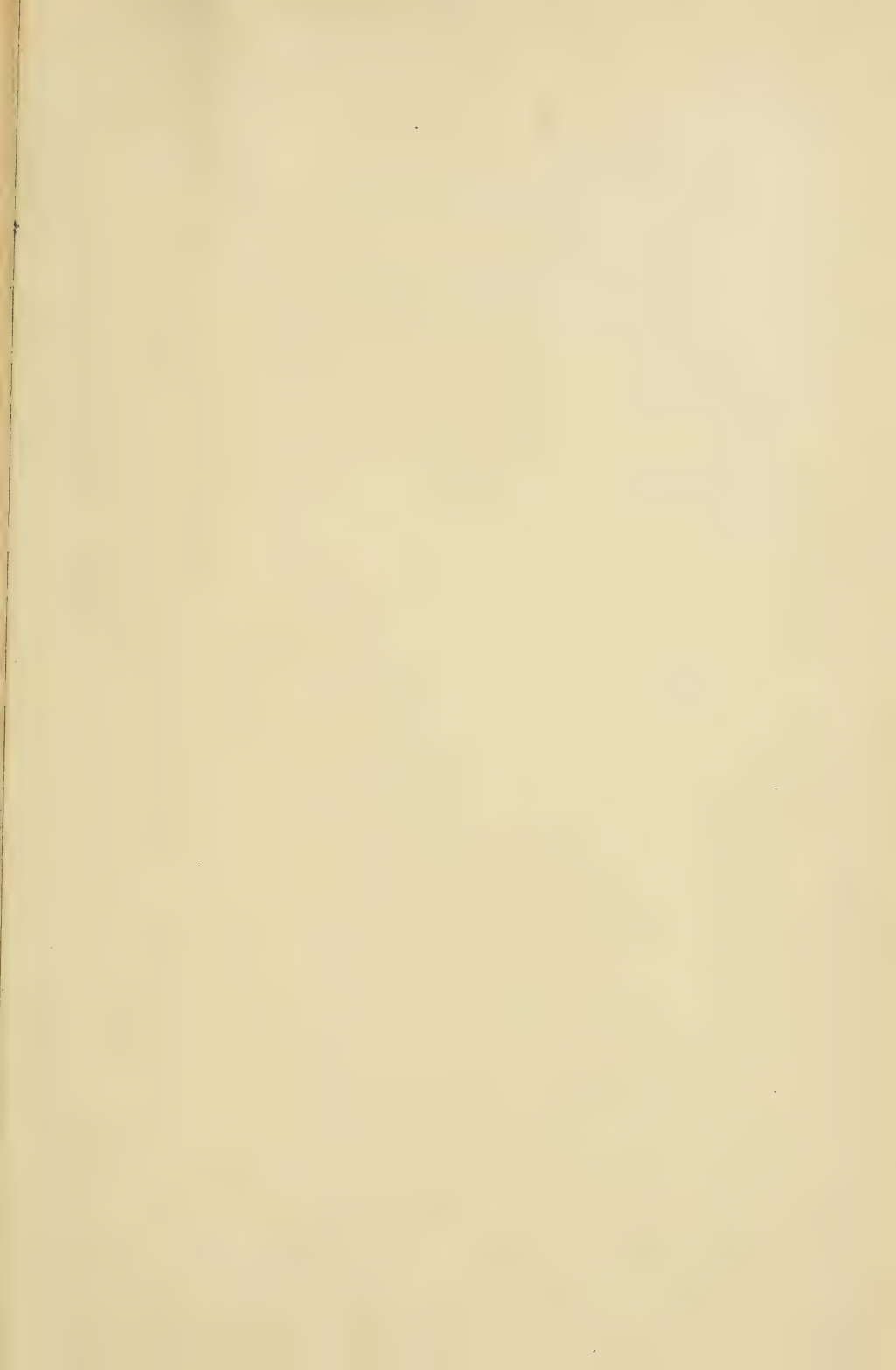
Mark ix. 2.

[καί μετὰ]
 Μ[εράς ἐξ παρα]λαμβάνει οἱς
 τὸν πέτρον καὶ Ἰάκωβ
 καὶ Ἰωάννην· καὶ ἰδὼν
 γείατο ὁ κύριος ὁ σὺν ἡλόν
 κατὰ διὰ νημερίους· καὶ
 μεταμορφοῦται ἐμπρός

ⲙⲓ	ⲗ	ⲓ	ⲙⲓ
πζ			
πζ	ϥζ		ροα
	ϥη		ροβ

Mark ix. 7, 8.

μοῦ ὁ ἀγαπητός ἐνελε
 ἡμῶν· ἀκούετε αὐτοῦ·
 καὶ ἐγὼ σπερίβλεψά με
 νοί· οὐκέτι [οὐδὲν αἰδόν]
 εἰ μὴ ἡμῶν· καὶ ἰδὼν



ΠΑΡΕΚΟΙΤΑΙΜΕΝ ΑΙΤΙ
ΝΤΕΧΑΙΛΑΙΟΝ ΑΙΤΙΝΤΑ
ΤΤΑΛΩΝ ΒΑΠΤΙΣΜΟΥ
ΕΤΩΝΙΚΑΙΠΡΟΠΡΩΝ



ΑΥΤΟΙΣΤΑΙΝ ΗΑ, ΠΑΡΕΚΟΙΤΑΙ
ΕΟΝ ΤΑΥΤΟΙΣ ΔΙΕΡΕΥΝΑΙ ΕΤΑ
ΑΙΤΙΝΤΑ ΑΙΤΙΝΤΑ ΑΙΤΙΝΤΑ
ΑΙΤΙΝΤΑ ΑΙΤΙΝΤΑ ΑΙΤΙΝΤΑ
ΑΙΤΙΝΤΑ ΑΙΤΙΝΤΑ ΑΙΤΙΝΤΑ



ΙΕΡΕΥΝΑΙ ΤΑΙΣ ΑΙΤΙΝΤΑΙΣ
ΙΕΡΕΥΝΑΙ ΤΑΙΣ ΑΙΤΙΝΤΑΙΣ
ΙΕΡΕΥΝΑΙ ΤΑΙΣ ΑΙΤΙΝΤΑΙΣ
ΙΕΡΕΥΝΑΙ ΤΑΙΣ ΑΙΤΙΝΤΑΙΣ
ΙΕΡΕΥΝΑΙ ΤΑΙΣ ΑΙΤΙΝΤΑΙΣ
ΙΕΡΕΥΝΑΙ ΤΑΙΣ ΑΙΤΙΝΤΑΙΣ
ΙΕΡΕΥΝΑΙ ΤΑΙΣ ΑΙΤΙΝΤΑΙΣ
ΙΕΡΕΥΝΑΙ ΤΑΙΣ ΑΙΤΙΝΤΑΙΣ
ΙΕΡΕΥΝΑΙ ΤΑΙΣ ΑΙΤΙΝΤΑΙΣ
ΙΕΡΕΥΝΑΙ ΤΑΙΣ ΑΙΤΙΝΤΑΙΣ

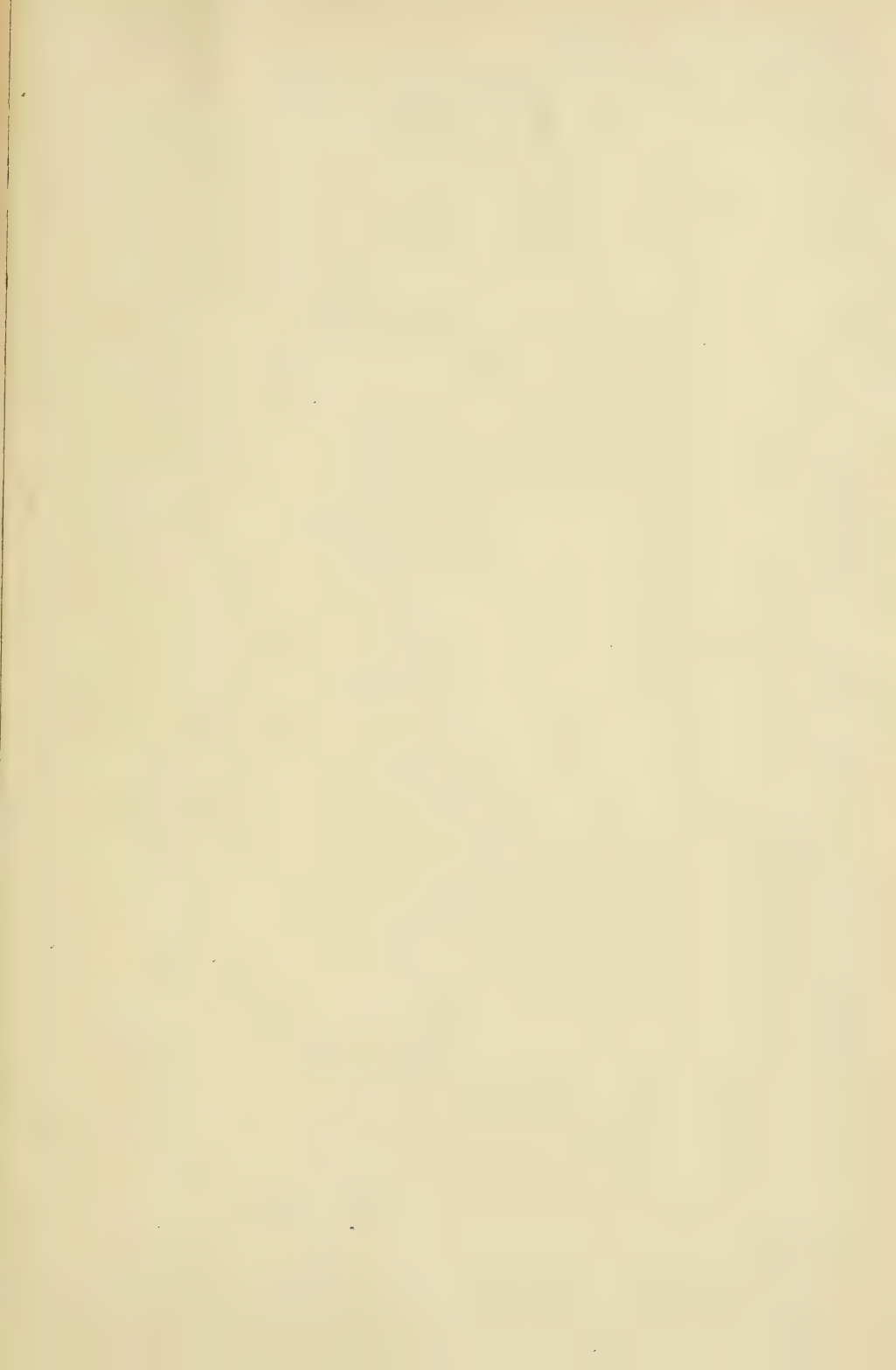
ΠΑΡΕΚΟΙΤΑΙΜΕΝ ΑΙΤΙ
ΑΥΤΟΙΣΤΑΙΝ ΗΑ, ΠΑΡΕΚΟΙΤΑΙ
ΕΟΝ ΤΑΥΤΟΙΣ ΔΙΕΡΕΥΝΑΙ ΕΤΑ
ΑΙΤΙΝΤΑ ΑΙΤΙΝΤΑ ΑΙΤΙΝΤΑ
ΑΙΤΙΝΤΑ ΑΙΤΙΝΤΑ ΑΙΤΙΝΤΑ

[illegible]

22

12 13 14 15
 16 17 18 19
 20 21 22 23
 24 25 26 27
 28 29 30 31
 32 33 34 35
 36 37 38 39
 40 41 42 43
 44 45 46 47
 48 49 50 51
 52 53 54 55
 56 57 58 59
 60 61 62 63
 64 65 66 67
 68 69 70 71
 72 73 74 75
 76 77 78 79
 80 81 82 83
 84 85 86 87
 88 89 90 91
 92 93 94 95
 96 97 98 99
 100 101 102 103
 104 105 106 107
 108 109 110 111
 112 113 114 115
 116 117 118 119
 120 121 122 123
 124 125 126 127
 128 129 130 131
 132 133 134 135
 136 137 138 139
 140 141 142 143
 144 145 146 147
 148 149 150 151
 152 153 154 155
 156 157 158 159
 160 161 162 163
 164 165 166 167
 168 169 170 171
 172 173 174 175
 176 177 178 179
 180 181 182 183
 184 185 186 187
 188 189 190 191
 192 193 194 195
 196 197 198 199
 200 201 202 203
 204 205 206 207
 208 209 210 211
 212 213 214 215
 216 217 218 219
 220 221 222 223
 224 225 226 227
 228 229 230 231
 232 233 234 235
 236 237 238 239
 240 241 242 243
 244 245 246 247
 248 249 250 251
 252 253 254 255
 256 257 258 259
 260 261 262 263
 264 265 266 267
 268 269 270 271
 272 273 274 275
 276 277 278 279
 280 281 282 283
 284 285 286 287
 288 289 290 291
 292 293 294 295
 296 297 298 299
 300 301 302 303
 304 305 306 307
 308 309 310 311
 312 313 314 315
 316 317 318 319
 320 321 322 323
 324 325 326 327
 328 329 330 331
 332 333 334 335
 336 337 338 339
 340 341 342 343
 344 345 346 347
 348 349 350 351
 352 353 354 355
 356 357 358 359
 360 361 362 363
 364 365 366 367
 368 369 370 371
 372 373 374 375
 376 377 378 379
 380 381 382 383
 384 385 386 387
 388 389 390 391
 392 393 394 395
 396 397 398 399
 400 401 402 403
 404 405 406 407
 408 409 410 411
 412 413 414 415
 416 417 418 419
 420 421 422 423
 424 425 426 427
 428 429 430 431
 432 433 434 435
 436 437 438 439
 440 441 442 443
 444 445 446 447
 448 449 450 451
 452 453 454 455
 456 457 458 459
 460 461 462 463
 464 465 466 467
 468 469 470 471
 472 473 474 475
 476 477 478 479
 480 481 482 483
 484 485 486 487
 488 489 490 491
 492 493 494 495
 496 497 498 499
 500 501 502 503
 504 505 506 507
 508 509 510 511
 512 513 514 515
 516 517 518 519
 520 521 522 523
 524 525 526 527
 528 529 530 531
 532 533 534 535
 536 537 538 539
 540 541 542 543
 544 545 546 547
 548 549 550 551
 552 553 554 555
 556 557 558 559
 560 561 562 563
 564 565 566 567
 568 569 570 571
 572 573 574 575
 576 577 578 579
 580 581 582 583
 584 585 586 587
 588 589 590 591
 592 593 594 595
 596 597 598 599
 600 601 602 603
 604 605 606 607
 608 609 610 611
 612 613 614 615
 616 617 618 619
 620 621 622 623
 624 625 626 627
 628 629 630 631
 632 633 634 635
 636 637 638 639
 640 641 642 643
 644 645 646 647
 648 649 650 651
 652 653 654 6





Inches

1

2

24
6 14
6 5
17

2
pao

二

$\begin{matrix} T \\ N \\ P \end{matrix}$

ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ

4 5 6

15
9Δ

ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ

ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ

ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ
ΑΙΤΙΝ ΤΗΝ ΤΗΝ ΤΗΝ

16 18 Δ Γ Γ 15
18 18 18 18



BRYN MAWR COLLEGE



3 1796 00131 0776

BRYN MAWR COLLEGE
LIBRARY

PLEASE LEAVE CARD IN POCKET

040

AS. DUE

H29

36

H25

V.1-5

V.1-5

